

ATTACHMENT A

FILED UNDER SEAL

Sonos, Inc. v. Google LLC

Sonos' Patent Showdown Summary Judgment Presentation

Case Nos. 20-6754, 21-7559 (N.D. Cal.)

July 13, 2022

GOOGLE INFRINGES CLAIM 1 OF '885 PATENT

Zone Scenes Infringement - Claim 1 of '885 Patent

1. [1.0] A first zone player comprising [1.1] a network interface that is configured to communicatively couple the first zone player to at least one data network; [1.2] one or more processors; [1.3] a non-transitory computer-readable medium; and [1.4] program instructions stored on the non-transitory computer-readable medium that, when executed by the one or more processors, cause the first zone player to perform functions comprising:

[1.5] while operating in a standalone mode in which the first zone player is configured to play back media individually in a networked media playback system comprising the first zone player and at least two other zone players:

(i) *receiving*, from a network device over a data network, *a first indication that the first zone player has been added to a first zone scene comprising a first predefined grouping of zone players including at least the first zone player and a second zone player* that are to be configured for synchronous playback of media when the first zone scene is invoked; and

(ii) *receiving*, from the network device over the data network, *a second indication that the first zone player has been added to a second zone scene comprising a second predefined grouping of zone players including at least the first zone player and a third zone player* that are to be configured for synchronous playback of media when the second zone scene is invoked, wherein the second zone player is different than the third zone player;

[1.6] after receiving the first and second indications, continuing to operate in the standalone mode until a given one of the first and second zone scenes has been selected for invocation;

[1.7] after the given one of the first and second zone scenes has been selected for invocation, receiving, from the network device over the data network, an instruction to operate in accordance with a given one of the first and second zone scenes respectively comprising a given one of the first and second predefined groupings of zone players; and

[1.8] based on the instruction, transitioning from operating in the standalone mode to operating in accordance with the given one of the first and second predefined groupings of zone players such that the first zone player is configured to coordinate with at least one other zone player in the given one of the first and second predefined groupings of zone players over a data network in order to output media in synchrony with output of media by the at least one other zone player in the given one of the first and second predefined groupings of zone players.

Zone Scenes Infringement – Addressing Google's Arguments

- The Accused Products Can Be Placed Into "Zone Scenes"
- The Accused Products Receive the Claimed Indications

Zone Scenes Infringement – Google Speakers Can Be Placed in a "Zone Scene"

Zone Scene

Sonos' Construction

A previously-saved grouping of zone players that are to be configured for synchronous playback of media when the zone scene is invoked

Google's Construction

A previously-saved grouping of zone players according to a common theme

Google Argues For New Construction While Claiming Law Of the Case Applies

12 in a particular scene (e.g., morning, afternoon or garden),” *id.* at 12, and the Court split the difference
13 between the two parties’ constructions, ruling that a zone scene meant “[a] previously-saved group
14 of zone players according to a common theme.” Transferred Action, Dkt. 106 at 38. Sonos did not
15 request reconsideration of that construction in the Western District and has not requested
16 reconsideration of that construction before this Court. As such, it is now the law of the case. *See*
17 Dkt. 200 at 3-5 (Google Resp. Claim Constr. Br.) (discussing application of law of the case); *Snyders*
18 *Heart Valve LLC v. St. Jude Medical*, Case No. 18-cv-2030, 2020 WL 1445835, *4, 6-7 (D. Minn.
19 March 25, 2020) (adopting “the Texas court’s prior constructions” because “under law-of-the-
20 case/reconsideration principles, ‘as a rule,’ courts should be ‘loathe’ to revisit prior decisions of its
21 own or of a coordinate court in the same case” unless the decisions were “clearly erroneous” or the
22 parties “present new evidence.”). Sonos has neither raised any “new evidence” to overturn the

are automatically effectuated.” Dkt. 208-2 (’885 Pat.) at 8:47-51. The specification discloses that a “zone scene command could apply the following attributes:

- Set volumes levels in each zones (each zone can have a different volume)
- Mute/Unmute zones.
- Select and play specific music in the zones.
- Set the play mode of the music (Shuffle, Repeat, Shuffle-repeat)
- Set the music playback equalization of each zone (e.g., bass treble).”

Id. at 9:20-30 (bullets added for clarity). A zone scene or theme, therefore, is not simply a group of speakers as Sonos alleges. It must include the “theme” attributes described above, which differentiates “zone scenes” from the admittedly conventional and well-known speaker groups. Indeed, the specification of the ’885 patent repeatedly discusses “conventional multi-zone audio systems” and improvements to those audio systems using zone scenes. *Id.* at 1:46-2:24.

Embodiments of "Zones Scenes" Don't Include Attributes



'885 Patent

For instance, a "Morning" zone scene/configuration command would link the Bedroom, Den and Dining Room together in one action. Without this single command, the user would need to manually and individually link each zone. FIG. 3A provides an illustration of one zone scene, where the left column shows the starting zone grouping—all zones are separate, the column on the right shows the effects of grouping the zones to make a group of 3 zones named after "Morning".

Col. 8:53-61.

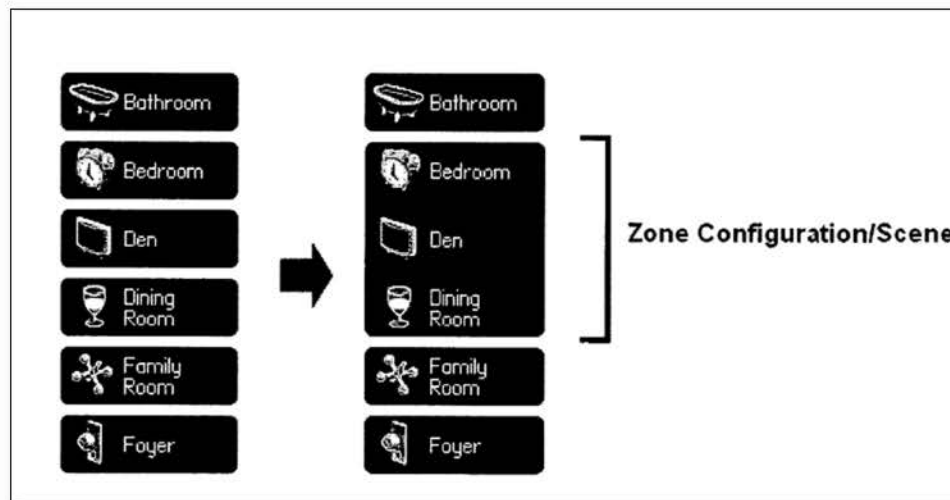


Fig 3A.



'885 Patent

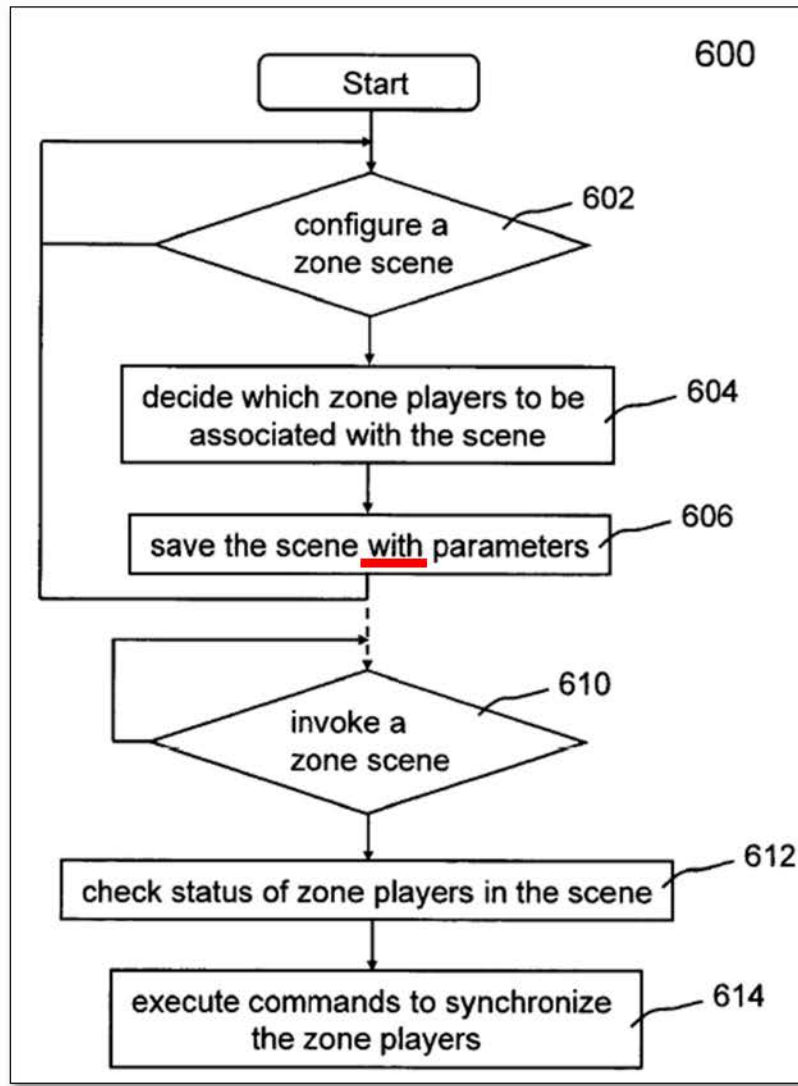
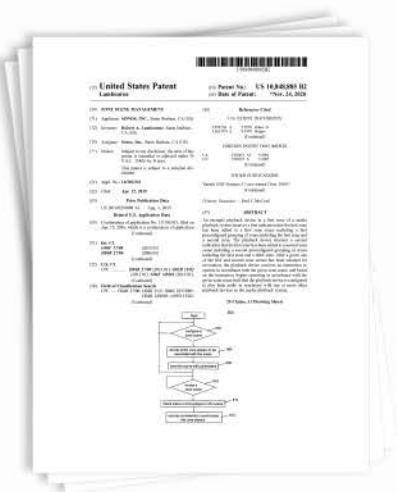


Fig 6.

Embodiments of "Zones Scenes" Don't Include Google's Proffered "Attributes"

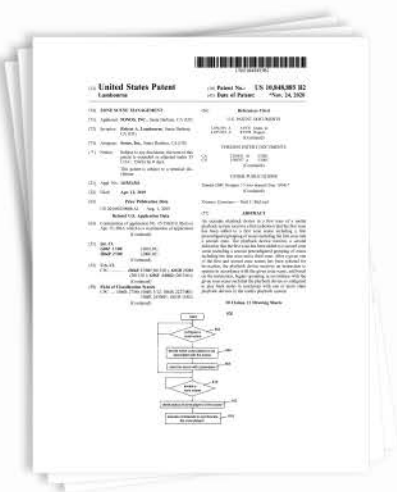


'885 Patent

According to still another aspect of the present invention, a controlling device (also referred to herein as controller) is provided to facilitate a user to select any of the players in the system to form respective groups each of which is set up per a scene. Although various scenes may be saved in any of the members in a group, commands are preferably sent from the controller to the rest of the members when one of the scenes is executed. Depending on implementation, the commands include parameters pertaining to identifiers of the players, volumes settings, audio source and etc.

Col. 2:52-61.

Specification Explains "Morning" is a Zone Scene



'885 Patent

may be sometimes quite time consuming. According to one embodiment, a set of zones can be dynamically linked together using one command. Using what is referred to herein as a theme or a zone scene, zones can be configured in a particular scene (e.g., morning, afternoon, or garden), where a predefined zone grouping and setting of attributes for the grouping are automatically effectuated.

Col. 8:45-52.

Google Admitted Naming Information is Thematic Information

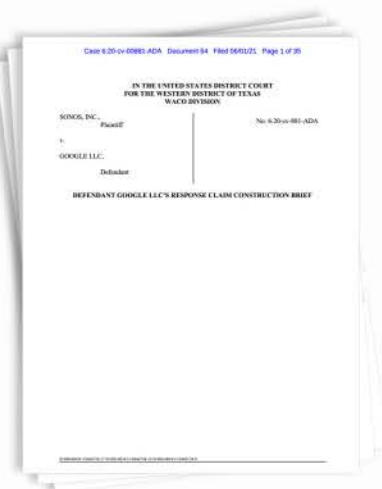


Google MSJ Opp.
(Dkt. 247.03)

1 (citing Transferred Action, Dkt. 64 at 12-15). Sonos claims Google admitted that “names reflecting
 2 a specific area of a user’s home (e.g., ‘garden’)” is the “‘theme’ information that would satisfy the
 3 ‘according to a common theme’ aspect of Google’s proposed construction.” *Id.* This is a
 4 disingenuous and faulty recitation of Google’s brief. First, Sonos could not genuinely believe

Page 6.

Google Admitted Naming Information is Thematic Information



Dkt. 64
(Google's WDTX
Markman Br.)

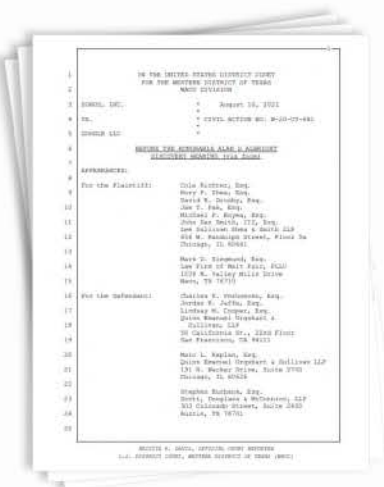
Accordingly, Google's construction is the correct one. It requires that the "zone scene" be comprised of two or more zones, that those zones are grouped together according to a common theme, and provides examples of the thematic information such as "morning, afternoon, or garden." Those examples of scenes are non-limiting and are used throughout the specification, amply supported by the intrinsic evidence. Google's construction provides the jury with guidance as to the meaning of those terms by including examples that were also used in the patent's definition of the term, while not limiting the definition to the disclosed embodiments.

Page 13.

scene." Regardless, Google separately defined "zone," so there is no ambiguity in its construction, and it provided further guidance as to the meaning of "scene," which is that it requires a common theme. Google also provided examples of scene information (morning, afternoon, or garden), taken directly from the specification, to illuminate the "zone scene" term for the jury. Google's construction therefore defines and describes the term, whereas Sonos's does not.

Page 15.

Google Admitted Naming Information is Thematic Information



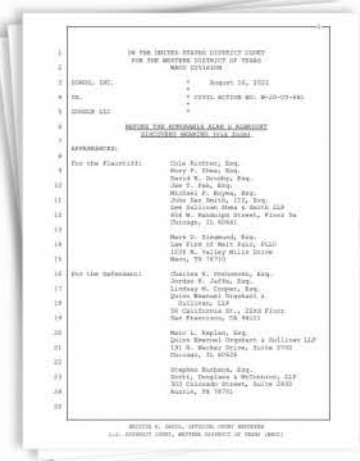
Dkt. 106
(WDTX Markman Hr'g Tr.)

MR. VERHOEVEN: Well, in your tentative, Your Honor, the -- in your tentative, you've adopted the plaintiff's proposed construction, which I'm going to get to -- I can go right there right now, if you would like, Your Honor -- and in our view that does not require a scene or a theme. It's the same thing as a definition of a zone.

And so we think that, at a minimum, it should just be plain and ordinary meaning of what a scene or theme is. But we can't have a construction that reads out that there has to be a scene or a theme and the word "zone scene" because that's what the innovation is in this patent.

Pages 17-18.

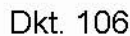
Google Admitted Naming Information is Thematic Information



Dkt. 106
(WDTX Markman Hr'g Tr.)

MR. VERHOEVEN: I'll merely add, Your Honor, that if you look at this provisional, it says, for example, morning scene. That's exactly what's in the specification that I showed you, what I was reading: For example, a "Morning" scene includes three zone players, each in a bedroom, den and dining room.

This is showing the exact same thing, and it's giving it a theme. It's called "morning scene." So --

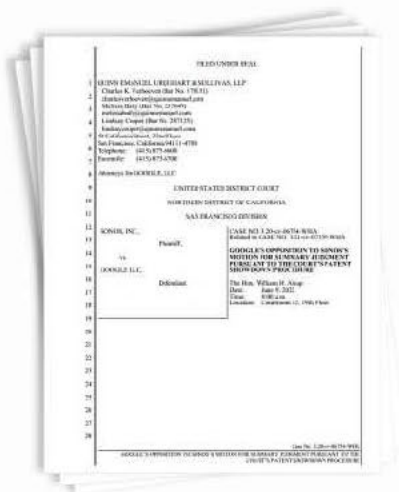


[MR. VERHOEVEN:] So we've proposed a common theme because that's what the specification says is an alternative way of describing scene. And the theme would be, for example, grouping three areas as a morning scene or a morning theme because you get up in the morning and these are the three areas you want to have music in.

Pages 30-31.

No Dispute That Accused Technology Allows Grouping According to Common Theme

Case 3:09-cv-0104-WAX Document 318-1 Filed 08/06/12 Page 18 of 26



Google MSJ Opp.
(Dkt. 247.03)

12 Sonos again relies solely upon the "join_group" message to support its argument that the
13 claimed indication "include[es] at least the first zone player and a second zone player." Sonos Br.
14 at 17:12-22. However, the "join_group" message only includes a UUID, a name, and optionally a
15 according to the documents cited in Sonos's brief:

Page 10 (highlighting in original).

Zone Scenes Infringement – Addressing Google's Arguments

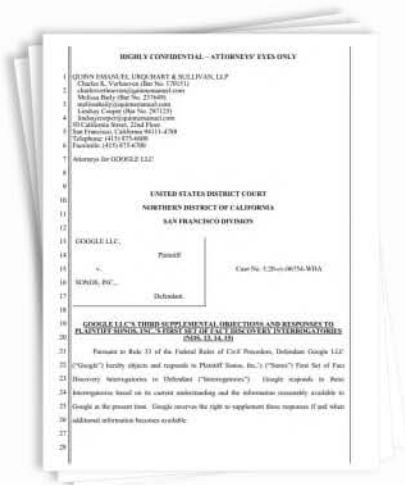
- The Accused Products Can Be Placed Into "Zone Scenes"
- The Accused Products Receive the Claimed Indications

The Identified Command Indicates The Speaker Has Been Added To a Group

Limitation 1.5(i): receiving, from a network device over a data network, a first indication that the first zone player has been added to a first zone scene comprising a first predefined grouping of zone players including at least the first zone player and a second zone player that are to be configured for synchronous playback of media when the first zone scene is invoked

Google's Interrogatory Response Shows that join_group Indicates the Speaker Has Been Added To a Group

Case 1:20-cv-01674-WJA Document 24-1 Filed 08/04/22 Page 22 of 126



In the Google Home app, a user may select a specific device and add it to a group in Home app, which causes the Google Home app to send a join_group command to that device.

Page 9.

Sonos MSJ, Exhibit B (Dkt.
209.04) (Google's
Interrogatory Responses)

The '885 Patent Shows That Speakers Are Added to Zones on Network Device

Case 3:20-cv-06754-LJA Document 63-1 Filed 09/05/22 Page 22 of 25



'885 Patent

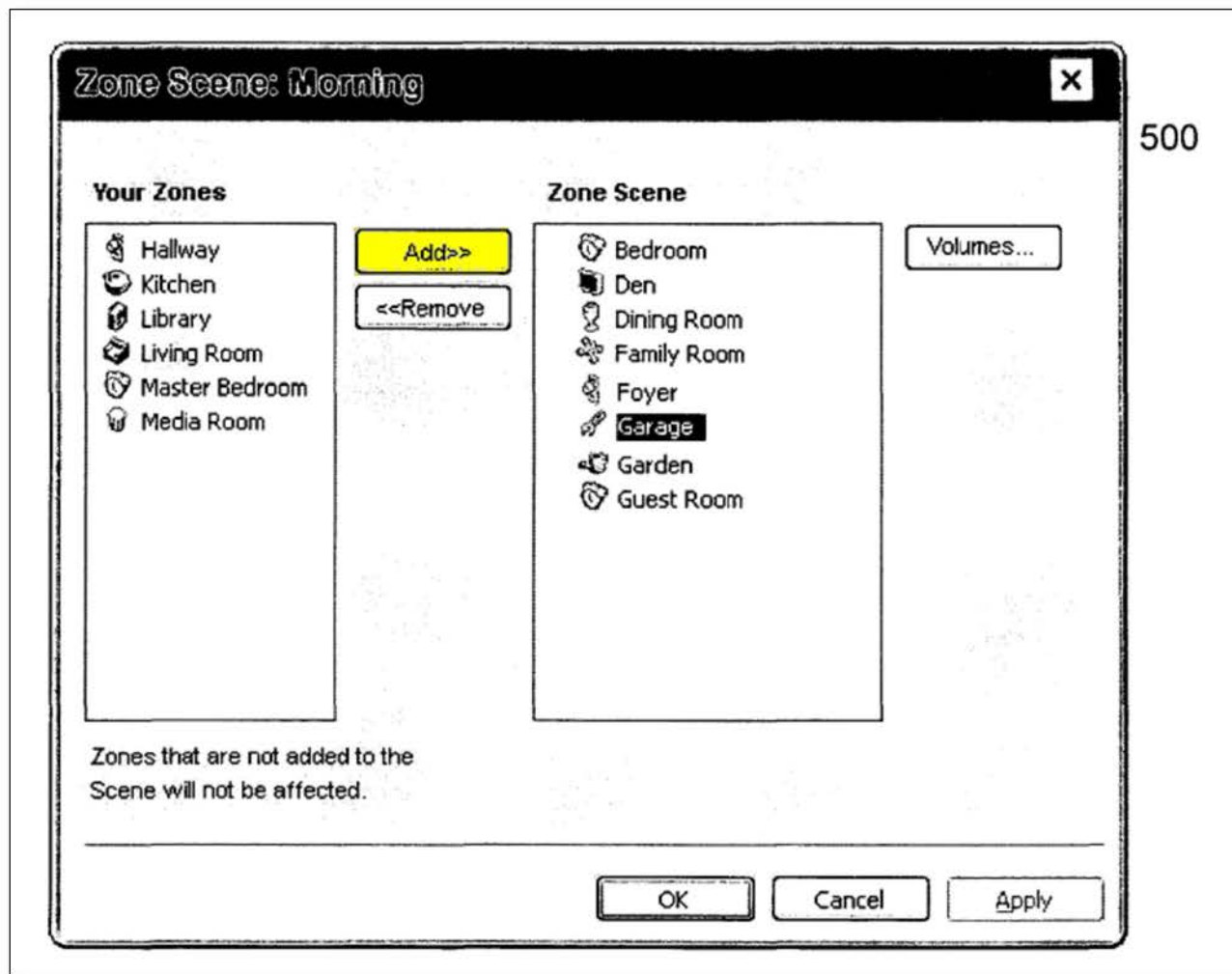


FIG 5 (annotated).

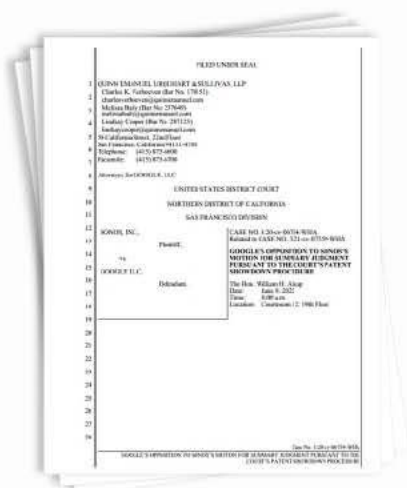
The Indication Need Not Identify the First and Second Zone Player

Limitation 1.5(i): receiving, from a network device over a data network, a first indication that the first zone player has been added to a first zone scene comprising a first predefined grouping of zone players including at least the first zone player and a second zone player that are to be configured for synchronous playback of media when the first zone scene is invoked

When this Court has interpreted statutes that include a list of terms or phrases followed by a limiting clause, we have typically applied an interpretive strategy called the "rule of the last antecedent." *See Barnhart v. Thomas*, 540 U.S. 20, 26, 124 S.Ct. 376, 157 L.Ed.2d 333 (2003). The rule provides that "a limiting clause or phrase ... should ordinarily be read as modifying only the noun or phrase that it immediately follows." *Ibid.*; see also Black's Law Dictionary 1532–1533 (10th ed. 2014) ("[Q]ualifying words or phrases modify the words or phrases immediately preceding them and not words or phrases more remote, unless the extension is necessary from the context or the spirit of the entire writing")

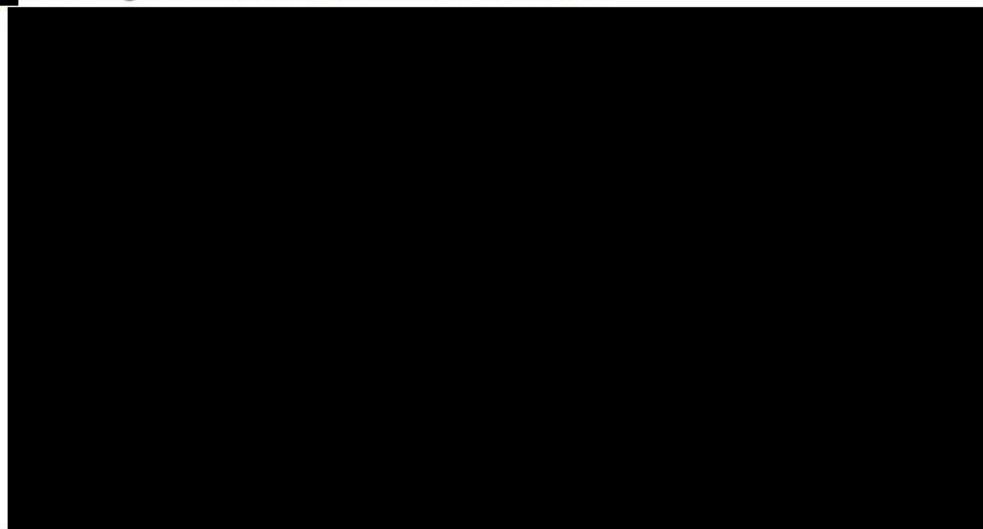
Lockhard v. United States, 577 U.S. 347, 350 (2016).

join_group Command Can Indicate Multiple Zone Players



Google MSJ Opp.
(Dkt. 247.03)

12 Sonos again relies solely upon the “join_group” message to support its argument that the
13 claimed indication “include[es] at least the first zone player and a second zone player.” Sonos Br.
14 at 17:12-22. However, the “join_group” message only includes a UUID, a name, and optionally a
15 [REDACTED] according to the documents cited in Sonos’s brief:



Page 10 (highlighting in original).

THE '885 PATENT ADEQUATELY DISCLOSES OVERLAPPING ZONE SCENES



'885 Patent

1. A first zone player comprising:
a network interface that is configured to communicatively couple the first zone player to at least one data network;
one or more processors;
a non-transitory computer-readable medium; and
program instructions stored on the non-transitory computer-readable medium that, when executed by the one or more processors, cause the first zone player to perform functions comprising:
while operating in a standalone mode in which the first zone player is configured to play back media individually in a networked media playback system comprising the first zone player and at least two other zone players:

- (i) receiving, from a network device over a data network, a first indication that the first zone player has been added to a first zone scene comprising a first predefined grouping of zone players including at least the first zone player and a second zone player that are to be configured for synchronous playback of media when the first zone scene is invoked; and
- (ii) receiving, from the network device over the data network, a second indication that the first zone player has been added to a second zone scene comprising a second predefined grouping of zone players including at least the first zone player and a third zone player that are to be configured for synchronous playback of media when the second zone scene is invoked, wherein the second zone player is different than the third zone player;

after receiving the first and second indications, continuing to operate in the standalone mode until a given one of the first and second zone scenes has been selected for invocation;
after the given one of the first and second zone scenes has been selected for invocation, receiving, from the network device over the data network, an instruction to operate in accordance with a given one of the first and second zone scenes respectively comprising a given one of the first and second predefined groupings of zone players; and
based on the instruction, transitioning from operating in the standalone mode to operating in accordance with the given one of the first and second predefined groupings of zone players such that the first zone player is configured to coordinate with at least one other zone player in the given one of the first and second predefined groupings of zone players over a data network in order to output media in synchrony with output of media by the at least one other zone player in the given one of the first and second predefined groupings of zone players.

Overlapping Zone Scenes Contemplated in '885 Patent Specification

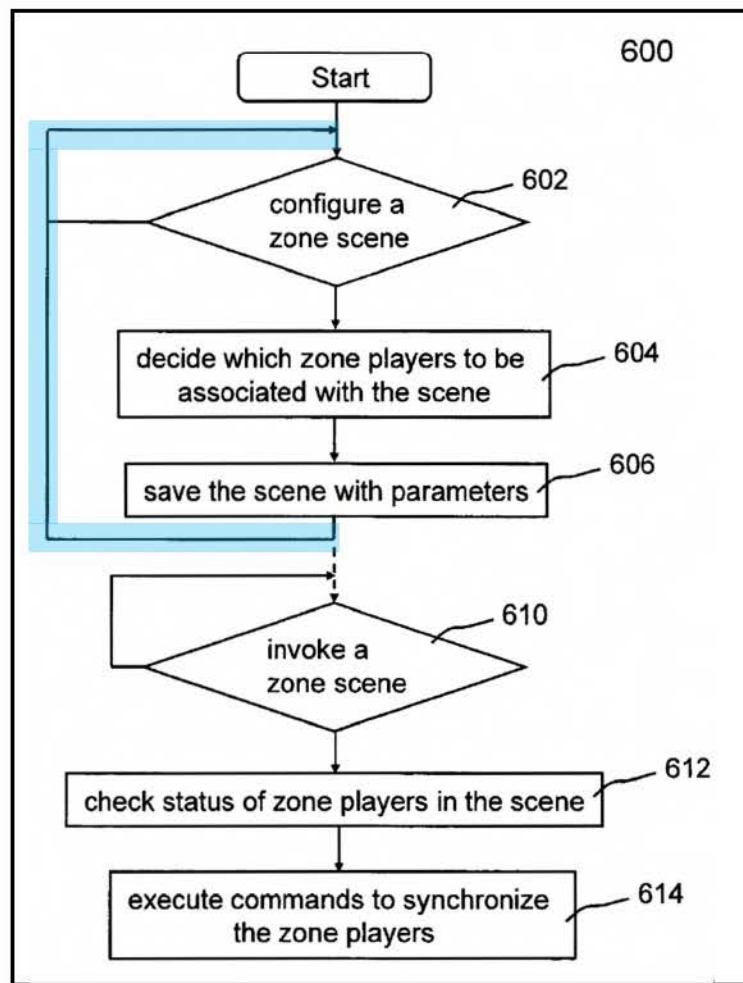
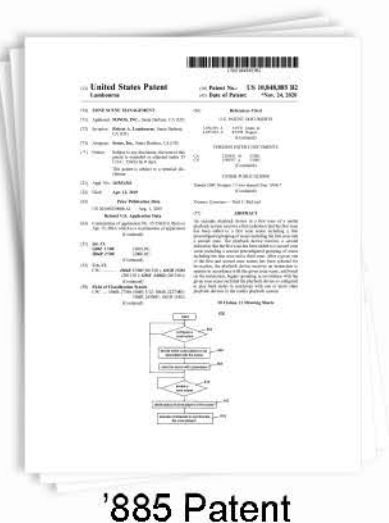
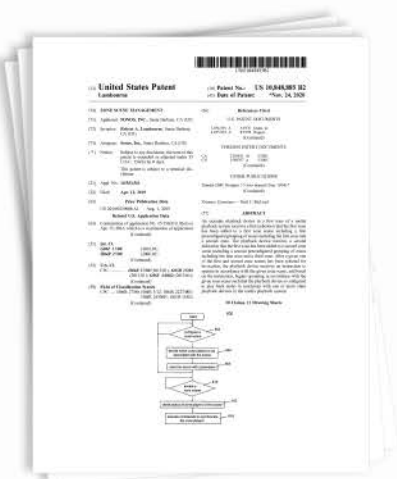


Fig. 6 (annotated).

Associated players in the scene. The user may go back to 602 to configure another scene if desired.

Overlapping Zone Scenes Contemplated in '885 Patent Specification



'885 Patent

FIG. 5B shows another user interface 520 to allow a user to form a scene. The user interface 520 that may be displayed on a controller or a computing device, lists available zones in a system. The list of zones in the user interface 520 includes ALL the zones in the system, including the zones that are already grouped. A checkbox is provided next to each

Col. 10:12-17.

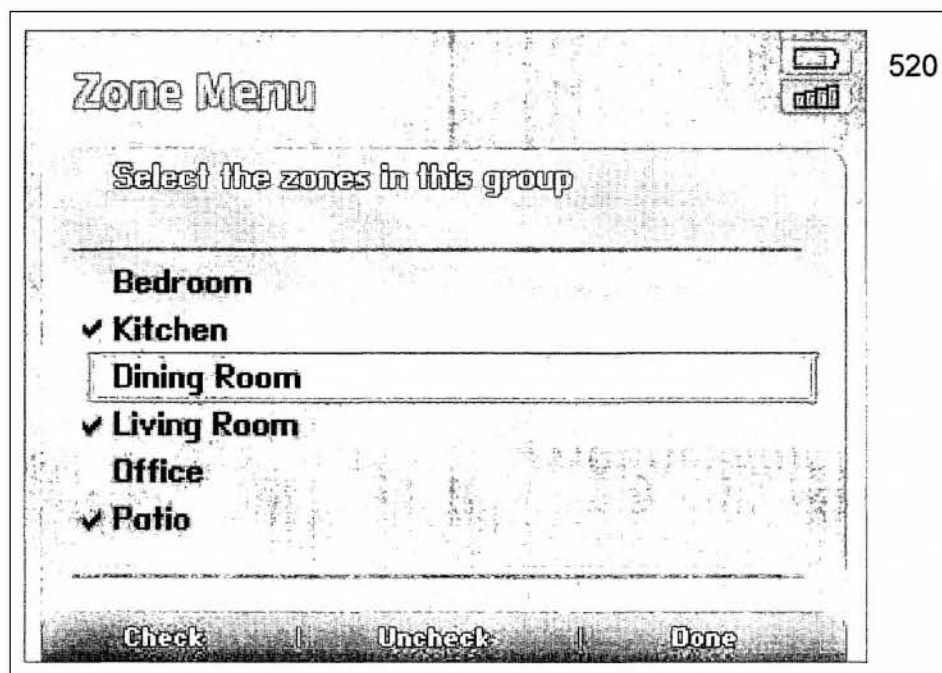


Fig. 5B.

Overlapping Zone Scenes Contemplated in '885 Patent Specification

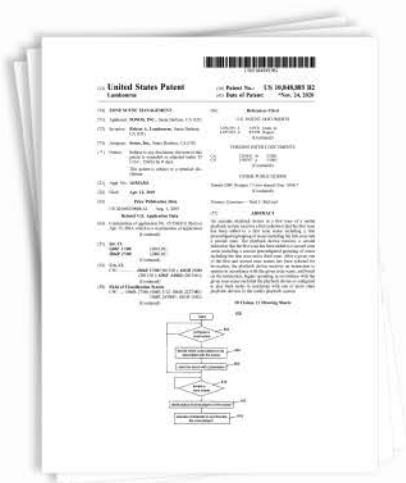


'885 Patent

a scene. Although various scenes may be saved in any of the members in a group, commands are preferably sent from the

Col. 2:56-58.

Overlapping Zone Scenes Contemplated in '885 Patent Specification



'885 Patent

"Morning" Zone Scene

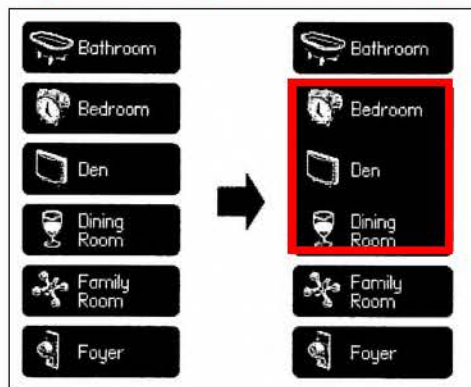


Fig. 3A (annotated).

For instance, a "Morning" zone scene/configuration command would link the Bedroom, Den and Dining Room together in one action. Without this single command, the

Col. 8:52-55.

"Evening" Zone Scene

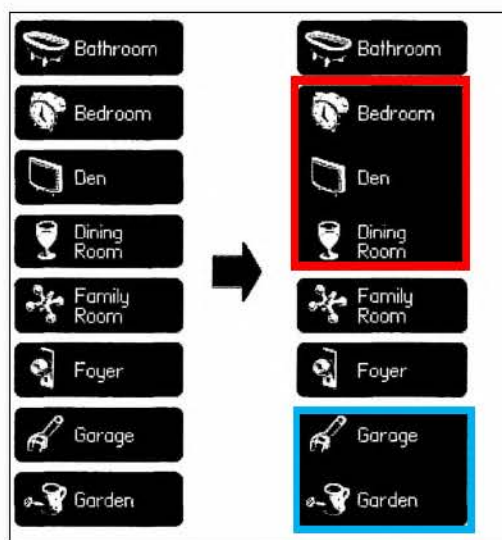


Fig. 3B (annotated).

In one embodiment as shown in FIG. 3B, a user defines multiple groups to be gathered at the same time. For example: an "Evening Scene" is desired to link the following zones:

Group 1

Bedroom

Den

Dining Room

Group 2

Garage

Garden

where Bathroom, Family Room and Foyer should be separated from any group if they were part of a group before the Zone Scene was invoked.

Col. 9:1-15.



'885 Patent

example, a person would like to listen to broadcast news from his/her favorite radio station in a bedroom, a bathroom and a den while preparing to go to work in the **morning**. The same person may wish to listen in the den and the living room to music from a compact disc in the **evening**. In order

Col. 2:1-5.

den and the living room are grouped for the music. Over the **weekend**, the audio players in the den, the living room, and a kitchen are grouped for party music. Because the morning group, the evening group and the weekend group contain the den, it can be difficult for the traditional system to accommodate the requirement of dynamically managing the ad hoc creation and deletion of groups.

Col. 2:11-17.

"Morning" Group

- Bedroom
- Bathroom
- **Den**

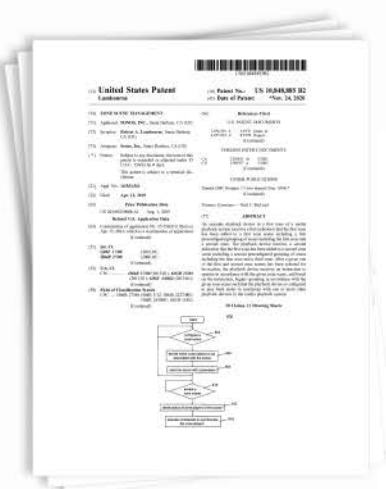
"Evening" Group

- **Den**
- Living Room

"Weekend" Group

- **Den**
- Living Room
- Kitchen

THE '885 PATENT ADEQUATELY DISCLOSES STANDALONE MODE



'885 Patent

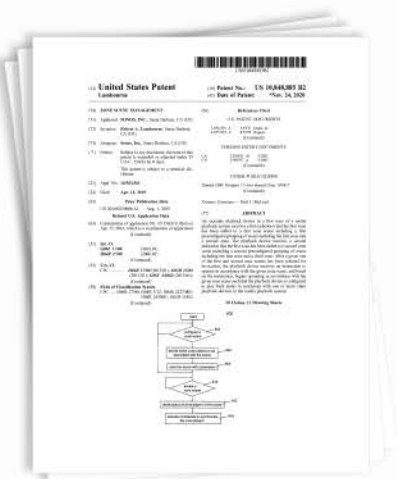
1. A first zone player comprising:
 - a network interface that is configured to communicatively couple the first zone player to at least one data network; one or more processors;
 - a non-transitory computer-readable medium; and
 - program instructions stored on the non-transitory computer-readable medium that, when executed by the one or more processors, cause the first zone player to perform functions comprising:
 - while operating in a standalone mode in which the first zone player is configured to play back media individually in a networked media playback system comprising the first zone player and at least two other zone players:
 - (i) receiving, from a network device over a data network, a first indication that the first zone player has been added to a first zone scene comprising a first predefined grouping of zone players including at least the first zone player and a second zone player that are to be configured for synchronous playback of media when the first zone scene is invoked; and
 - (ii) receiving, from the network device over the data network, a second indication that the first zone player has been added to a second zone scene comprising a second predefined grouping of zone players including at least the first zone player and a third zone player that are to be configured for synchronous playback of media when the second zone scene is invoked, wherein the second zone player is different than the third zone player;

after receiving the first and second indications, continuing to operate in the standalone mode until a given one of the first and second zone scenes has been selected for invocation;

after the given one of the first and second zone scenes has been selected for invocation, receiving, from the network device over the data network, an instruction to operate in accordance with a given one of the first and second zone scenes respectively comprising a given one of the first and second predefined groupings of zone players; and

based on the instruction, transitioning from operating in the standalone mode to operating in accordance with the given one of the first and second predefined groupings of zone players such that the first zone player is configured to coordinate with at least one other zone player in the given one of the first and second predefined groupings of zone players over a data network in order to output media in synchrony with output of media by the at least one other zone player in the given one of the first and second predefined groupings of zone players.

'885 Patent Specification Discloses Standalone Mode



'885 Patent

erroneous selection. The "music" button 248 activates a music menu, which allows the selection of an audio source (e.g., a song) to be added to a zone player's music queue for playback.

Col. 6:64-67.

players. The music transport functions described herein shall apply selectively to one of the sources when a corresponding one of the zone players or zone groups is selected.

Col. 7:23-25.

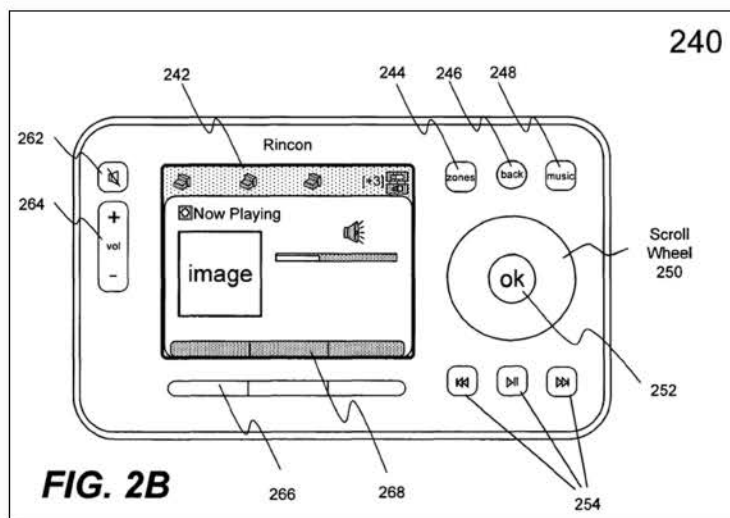
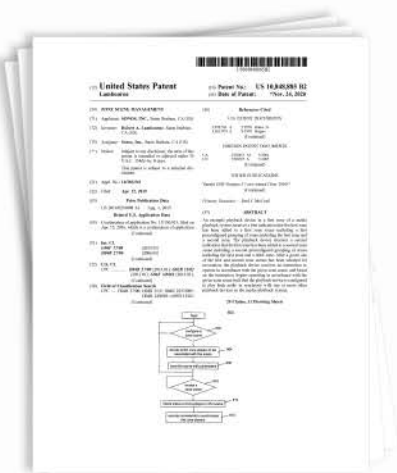


FIG. 2B.

'885 Patent Specification Discloses Standalone Mode



'885 Patent

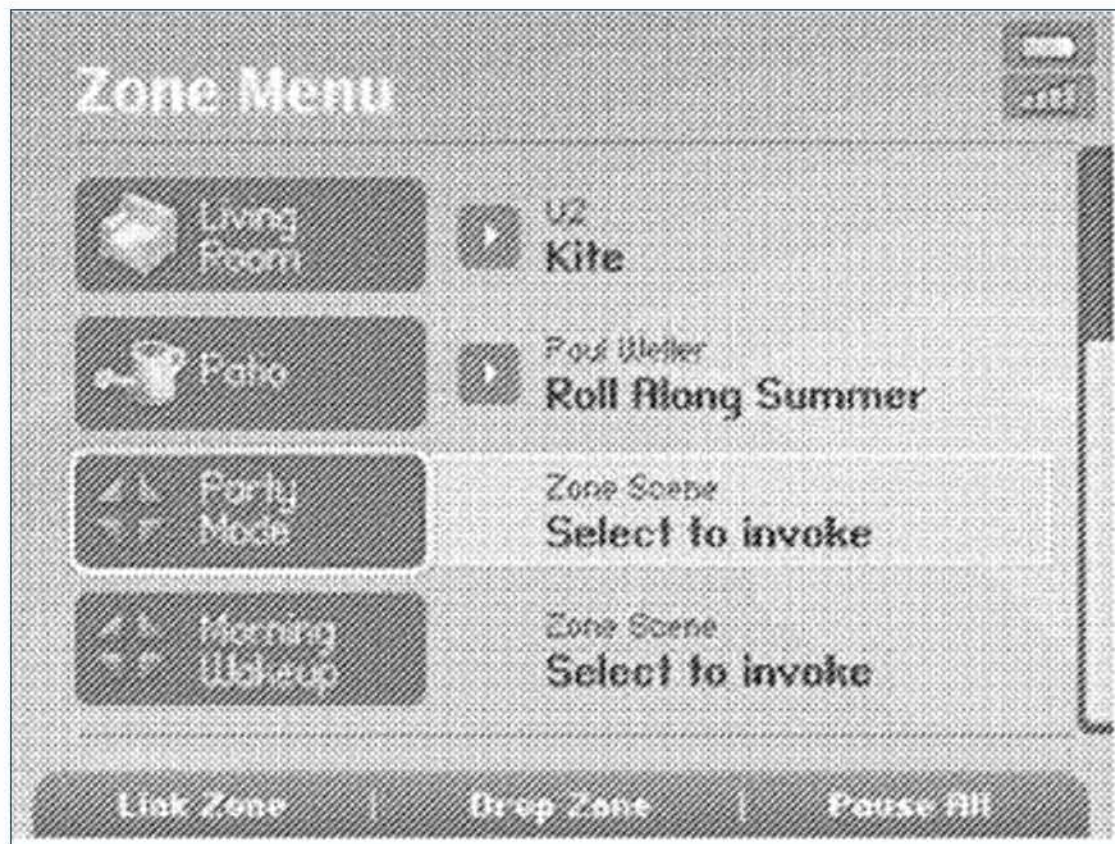
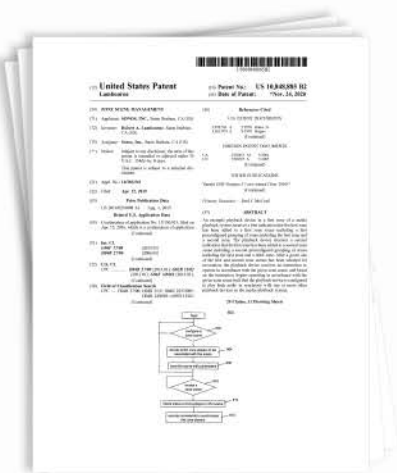


FIG. 7.

'885 Patent Specification Separates Defining and Invoking Groups



'885 Patent

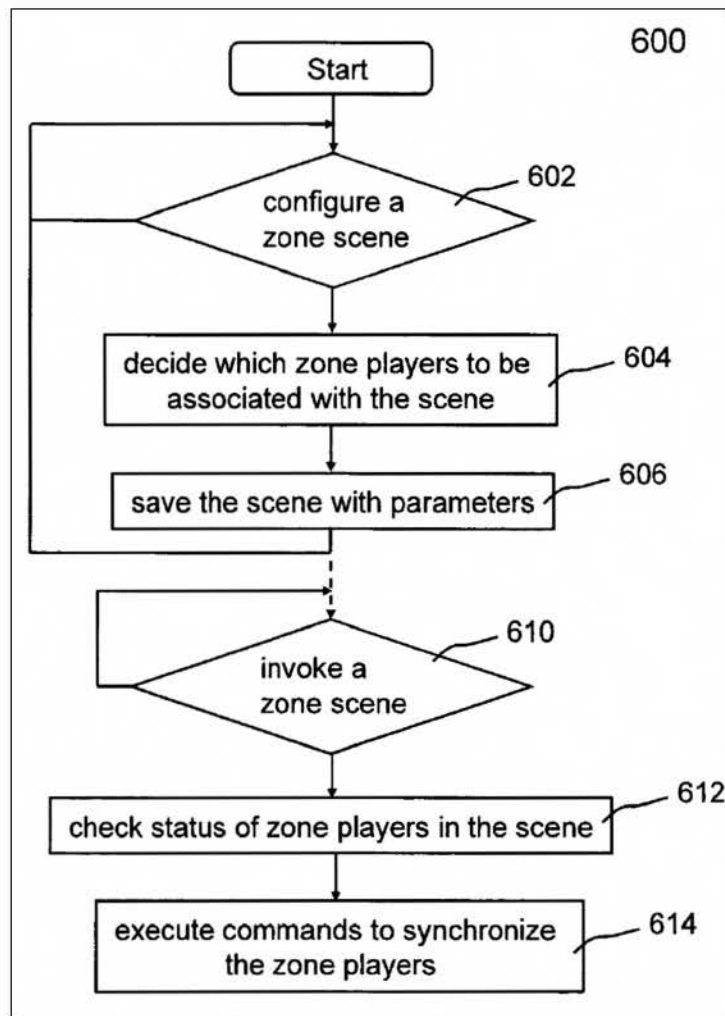


FIG 6.

'885 Patent Specification Discloses Speakers Playing Individually Until Group Invocation



'885 Patent

One important of the features, benefits and objects in the present invention is that that zones do not need to be separated before a zone scene is invoked. In one embodi-

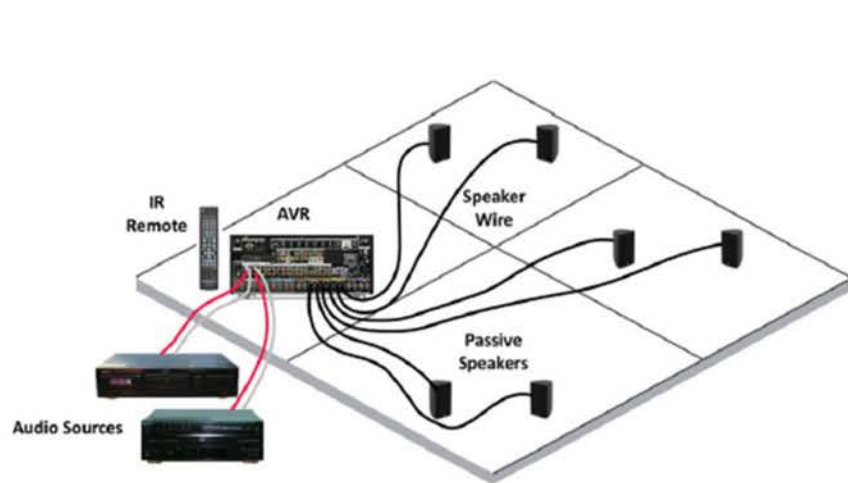
Col. 9:16-18.

One of the objects, features, and advantages of the present invention is to remotely control a plurality of multimedia players in a multi-zone system, playing and controlling the audio source synchronously if the players are grouped together, or playing and controlling the audio source individually if the players are disassociated with each other.

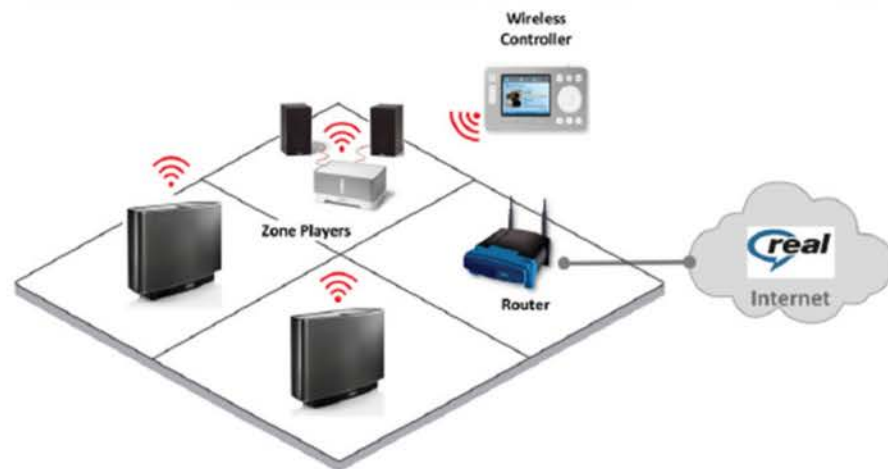
Col. 3:26-31.

THE '885 PATENT IS PATENT ELIGIBLE

Conventional System vs. Sonos System

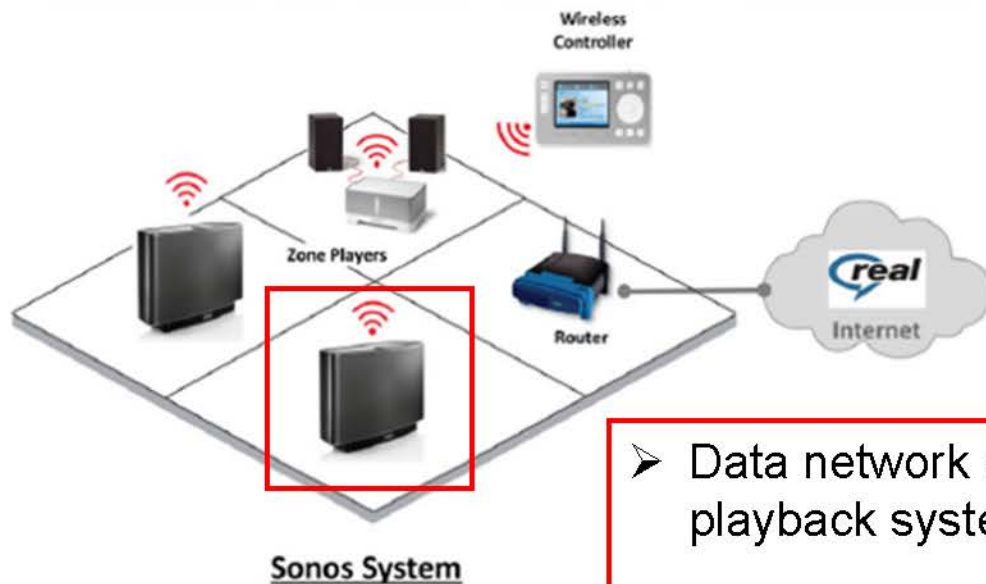


Conventional System



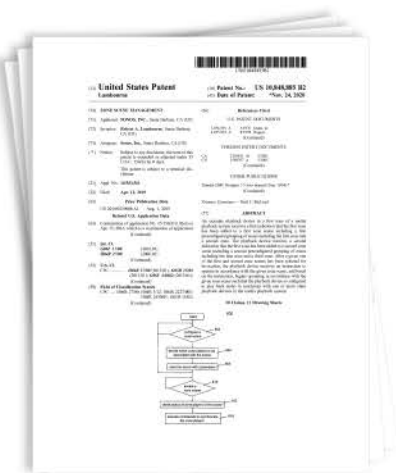
Sonos System

Claim 1 of The '885 Patent



- Data network device operating in networked media playback system
- Mode 1: standalone mode – setup phase
 - set up multiple pre-defined groupings (“zone scenes”) by specific networked message sequence
 - remain in standalone until invocation
- Mode 2: operate in zone scene – invoke phase
 - coordinate over data network with other zone players
 - play back media in sync

'885 Patent Specification



'885 Patent

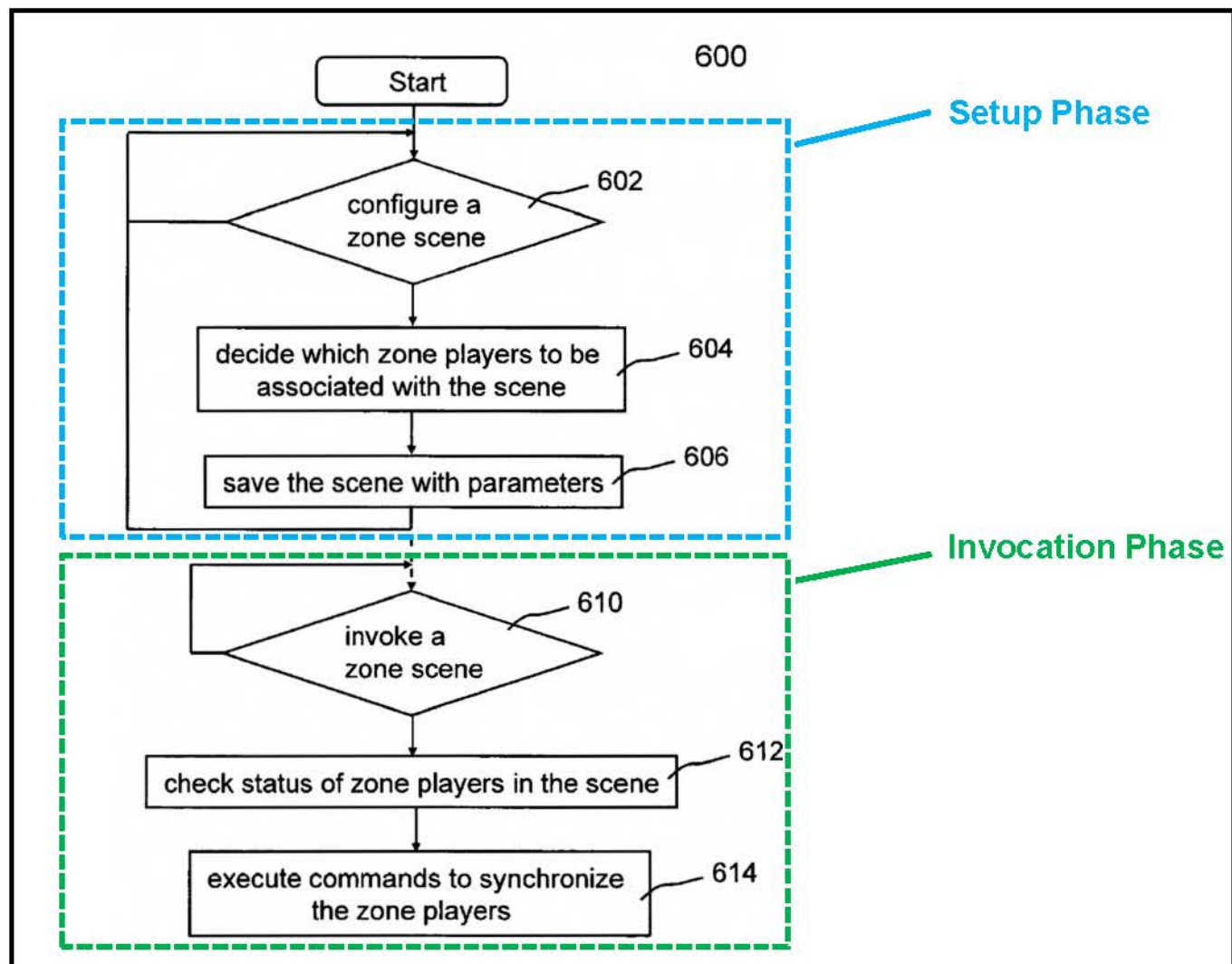


FIG 6 (annotated).

Claim 1 of The '885 Patent

1. A first zone player comprising:
 a network interface that is configured to communicatively couple the first zone player to at least one data network;
 one or more processors;
 a non-transitory computer-readable medium; and
 program instructions stored on the non-transitory computer-readable medium that, when executed by the one or more processors, cause the first zone player to perform functions comprising:
while operating in a standalone mode in which the first zone player is configured to play back media individually in a networked media playback system comprising the first zone player and at least two other zone players:
 (i) receiving, from a network device over a data network, a first indication that the first zone player has been added to a first zone scene comprising a first predefined grouping of zone players including at least the first zone player and a second zone player that are to be configured for synchronous playback of media when the first zone scene is invoked; and
 (ii) receiving, from the network device over the data network, a second indication that the first zone player has been added to a second zone scene comprising a second predefined grouping of zone players including at least the first zone player and a third zone player that are to be configured for synchronous playback of media when the second zone scene is invoked, wherein the second zone player is different than the third zone player;

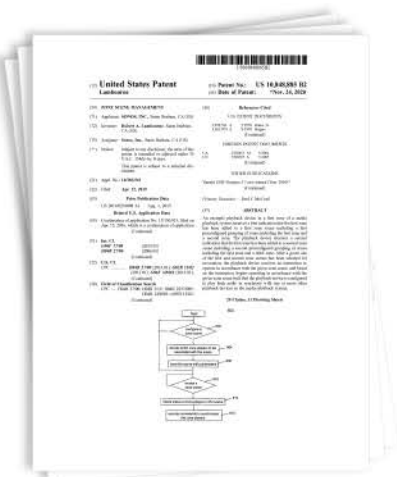
after receiving the first and second indications, continuing to operate in the standalone mode until a given one of the first and second zone scenes has been selected for invocation;

after the given one of the first and second zone scenes has been selected for invocation, receiving, from the network device over the data network, an instruction to operate in accordance with a given one of the first and second zone scenes respectively comprising a given one of the first and second predefined groupings of zone players; and

based on the instruction, transitioning from operating in the standalone mode to operating in accordance with the given one of the first and second predefined groupings of zone players such that the first zone player is configured to coordinate with at least one other zone player in the given one of the first and second predefined groupings of zone players over a data network in order to output media in synchrony with output of media by the at least one other zone player in the given one of the first and second predefined groupings of zone players.

'885 Patent

The Problem Being Solved By The '885 Patent



'885 Patent

example, a person would like to listen to broadcast news from his/her favorite radio station in a **bedroom**, a **bathroom** and a **den** while preparing to go to work in the **morning**. The same person may wish to listen in the den and the **living room** to music from a compact disc in the **evening**. In order

Col. 2:1-5.

den and the living room are grouped for the music. Over the weekend, the audio players in the den, the living room, and a kitchen are grouped for party music. Because the morning group, the evening group and the weekend group contain the den, it can be difficult for the traditional system to accommodate the requirement of dynamically managing the ad hoc creation and deletion of groups.

Col. 2:11-17.

'885 Patent Specification



'885 Patent

According to one aspect of the present invention, a mechanism is provided to allow a user to group some of the players according to a theme or scene, where each of the players is located in a zone. When the scene is activated, the players in the scene react in a synchronized manner. For example, the players in the scene are all caused to play an audio source or music in a playlist, wherein the audio source may be located anywhere on a network.

Col. 2:38-45.

One important of the features, benefits and objects in the present invention is that that zones do not need to be separated before a zone scene is invoked. In one embodi-

Col. 9:16-20.

One of the features, benefits and advantages in the present invention is to allow sets of related devices (controllers and operating components) to exist as a group without interfering with other components that are potentially visible on the same wired or wireless network. Each of the sets is configured to a theme or a scene.

Claim 1 is Patent-Eligible Under *Alice* and Progeny



Sonos, Inc. v. D&M Holdings, Inc.,

Case No. 14-cv-1330,

2017 WL 971700 (D. Del. Mar. 13, 2017)

1. A multimedia controller including a processor, the controller configured to:

provide a user interface for a player group, wherein the player group includes a plurality of players in a local area network, and wherein each player is an independent playback device configured to playback a multimedia output from multimedia source;

accept via the user interface an input to facilitate formation of the player group, wherein the input to facilitate formation of the player group indicates that at least two of the plurality of players in the local area network are to be included in the player group for synchronized playback of a multimedia output from the same multimedia source;

for any individual player in the player group, accept via the user interface a player-specific input to adjust a volume of that individual player, wherein the player-specific input to adjust the volume of that individual player causes that individual player to adjust its volume; and

accept via the user interface a group-level input to adjust a volume associated with the player group, wherein the group-level input to adjust the volume associated with the player group causes each of the players in the player group to adjust its respective volume.

lists of available players. This is inappropriate. Considering the claim in its entirety reveals that there is more to the claim than organizing information. Rather, the third limitation calls for “forming a zone group,” an action that involves controlling actual devices and effecting a fundamental alteration in how the plurality of zone players are networked together. The remaining limitations involve controlling the zone players that have been grouped together, also actions that are not accurately characterized as organizing information. Similarly, claim

Claim 1 is Patent-Eligible Under *Alice* and Progeny

- ✓ Specific improvement to networked media players
- ✓ Claimed *how* this improvement is carried out – not just the result
 - Claimed on a message-by-message basis
- ✓ Controlling networked media players to effect tangible changes in how they are networked and operate together



Sonos, Inc. v. D&M Holdings, Inc.,
Case No. 14-cv-1330,
2017 WL 971700 (D. Del. Mar. 13, 2017)

lists of available players. This is inappropriate. Considering the claim in its entirety reveals that there is more to the claim than organizing information. Rather, the third limitation calls for “forming a zone group,” an action that involves controlling actual devices and effecting a fundamental alteration in how the plurality of zone players are networked together. The remaining limitations involve controlling the zone players that have been grouped together, also actions that are not accurately characterized as organizing information. Similarly, claim

Claim 1 is Patent-Eligible Under *Alice* and Progeny



CardioNet, LLC v. InfoBionic, Inc.
955 F.3d 1358 (Fed. Cir. 2020)

identified by the device's ventricular beat detector. In our view, the claims "focus on a specific means or method that improves" cardiac monitoring technology; they are not "directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery." *McRO*, 837 F.3d at 1314 (citations omitted).



Huawei Technologies, Co, Ltd v.
Samsung Electronics Co, Ltd.
Case No. 16-2787,
2016 WL 6834614
(N.D. Cal. Nov. 21, 2016)

specific improvement to the way computers operate..." *Enfish*, 822 F.3d at 1336. Analogizing to *Enfish*, here the "plain focus of the claims is on an improvement to [cellular] functionality itself, not on economic or other tasks for which a computer is used in its ordinary capacity." *Id.* at 1336.

Claim 1 is Patent-Eligible Under *Alice* and Progeny



CardioNet, LLC v. InfoBionic, Inc.
955 F.3d 1358 (Fed. Cir. 2020)

1. A device, comprising:

a beat detector to identify a beat-to-beat timing of cardiac activity;

a ventricular beat detector to identify ventricular beats in the cardiac activity;

variability determination logic to determine a variability in the beat-to-beat timing of a collection of beats;

relevance determination logic to identify a relevance of the variability in the beat-to-beat timing to at least one of *atrial fibrillation* and *atrial flutter*; and

an event generator to generate an event when the variability in the beat-to-beat timing is identified as relevant to the at least one of *atrial fibrillation* and *atrial flutter* in light of the variability in the beat-to-beat timing caused by ventricular beats identified by the ventricular beat detector.

identified by the device's ventricular beat detector. In our view, the claims "focus on a specific means or method that *improves* cardiac monitoring technology; they are not "directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery." *McRO*, 837 F.3d at 1314 (citations omitted).

Claim 1 is Patent-Eligible Under *Alice* and Progeny

✓ Step 2 is unnecessary -- but nonetheless supports eligibility

A. Unique two-mode architecture

- Zone scene setup phase while in standalone mode, followed by invocation phase
- Coordinate with other zone players over a data network to synchronize playback of media

B. Multiple different pre-defined groups

- Claims specifically articulate that a given zone player is added to multiple different zone scenes, which all exist at the same time without invocation

GOOGLE DIRECTLY INFRINGES CLAIM 13 OF THE '615 PATENT

13[pre]. A tangible, non-transitory computer readable storage medium including instructions for execution by a processor, the instructions, when executed, cause a control device to implement a method comprising:

...

13.5 after detecting the set of inputs to transfer playback from the control device to the particular playback device, causing playback to be transferred from the control device to the particular playback device, wherein transferring playback from the control device to the particular playback device comprises:

- (a) causing one or more first cloud servers to *add multimedia content to a local playback queue* on the particular playback device, *wherein adding the multimedia content to the local playback queue comprises* the one or more *first cloud servers adding, to the local playback queue, one or more resource locators* corresponding to respective locations of the multimedia content at one or more second cloud servers of a streaming content service;
- (b) causing playback at the control device to be stopped; and
- (c) modifying the one or more transport controls of the control interface to control playback by the playback device; and

13.6 causing the particular playback device to play back the multimedia content, wherein the particular playback device playing back the multimedia content comprises the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content.

“Local Playback Queue on the Particular Playback Device”

13[pre]. A tangible, non-transitory computer readable storage medium including instructions for execution by a processor, the instructions, when executed, cause a control device to implement a method comprising:

...

13.5 after detecting the set of inputs to transfer playback from the control device to the particular playback device, causing playback to be transferred from the control device to the particular playback device, wherein transferring playback from the control device to the particular playback device comprises:

- (a) causing one or more first cloud servers to add multimedia content to *a local playback queue* on the particular playback device, wherein adding the multimedia content to *the local playback queue* comprises the one or more first cloud servers adding, to *the local playback queue*, one or more resource locators corresponding to respective locations of the multimedia content at one or more second cloud servers of a streaming content service;
- (b) causing playback at the control device to be stopped; and
- (c) modifying the one or more transport controls of the control interface to control playback by the playback device; and

13.6 causing the particular playback device to play back the multimedia content, wherein the particular playback device playing back the multimedia content comprises the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content.

Google's Construction for "Playback Queue" Is Flawed

- Google: "an ordered list of multimedia items that is selected by the user for playback"
- Google's proposed construction has numerous flaws
 - Plural "multimedia items" not required
 - Not limited to specific form, much less "ordered list"
 - Not limited to content "selected by the user"
 - Phrase "multimedia item" is not used in claim
 - Phrase "the user" lacks antecedent basis and ambiguous

Requiring Plural Items Excludes Embodiments

[Z]one player 602 may contain **a** uniform resource locator (URL) that specifies an address to **a particular audio track** in the cloud. Using the URL, the zone player 602 may retrieve **the audio track** from the cloud, and ultimately play the audio out of one or more zone players. *'615 Patent*, 11:65-12:3.

Once the zone player has **a** URL (or some other identification or address) for **a song** ... , the zone player can run on its own to fetch the content. *Id.*, 12:53-63.

[A]n application can pass **a song** identifier to a local playback system which looks up **the song** identifier and finds an available audio stream to which the user has a right to play and then plays **that song**. *Id.*, 13:36-40.

Information passed over to the local playback device may include **an** identifier for **a single track** ... and so on. *Id.*, 15:59-62.

Limiting to “Ordered List” Excludes Embodiments

Once the zone player has *a URL (or some other identification or address) for a ... playlist*, the zone player can run on its own to fetch the content. *'615 Patent, 12:53-63.*

Information passed over to the local playback device may include *an identifier* for ... *a playlist* ... and so on. *Id., 15:59-62.*

Limiting to User-Selected Content Excludes Embodiments

In another example of *an application determining* a playlist and/or other content *for playback*, a user enjoys listening to music on *an online music service* (e.g., turntable.fm or other virtual room that a user can enter to choose from a plurality of *online disc jockeys* (DJs) *deciding what to play next*) using his Mac Book Pro™ at home. He likes the unique user experience the service offers, and he frequently hops from room to room discovering new music. To maximize sound quality, he plays the music on his household playback system (e.g., Sonos™). '615 Patent, 13:1-10.

Information passed over to the local playback device may include an identifier for ... a *streaming radio station*, a *programmed radio station*, and so on. *Id.*, 15:59-62.

Google's Receivers Have a "Local Playback Queue"

13[pre]. A tangible, non-transitory computer readable storage medium including instructions for execution by a processor, the instructions, when executed, cause a control device to implement a method comprising:

...

13.5 after detecting the set of inputs to transfer playback from the control device to the particular playback device, causing playback to be transferred from the control device to the particular playback device, wherein transferring playback from the control device to the particular playback device comprises:

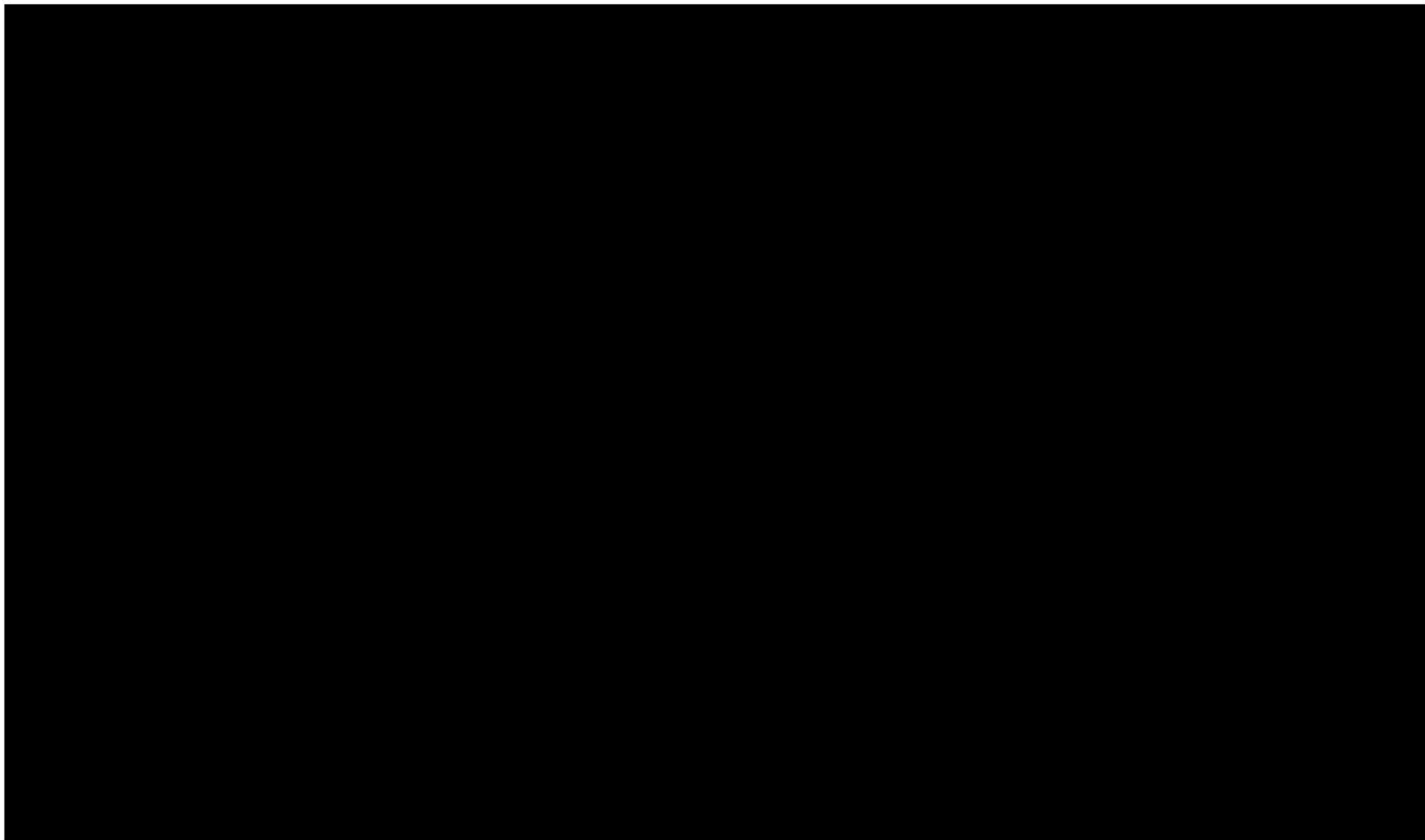
- (a) causing one or more first cloud servers to add multimedia content to *a local playback queue* on the particular playback device, wherein adding the multimedia content to *the local playback queue* comprises the one or more first cloud servers adding, to *the local playback queue*, one or more resource locators corresponding to respective locations of the multimedia content at one or more second cloud servers of a streaming content service;
- (b) causing playback at the control device to be stopped; and
- (c) modifying the one or more transport controls of the control interface to control playback by the playback device; and

13.6 causing the particular playback device to play back the multimedia content, wherein the particular playback device playing back the multimedia content comprises the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content.

Google's Receivers Have a "Local Playback Queue"

- Plain and ordinary meaning of “local playback queue on the particular playback device”
 - Data construct on the playback device that can contain one or more resource locators, each corresponding to multimedia content that the playback device is to playback (Ex. 1 (Schmidt Decl.), ¶69)

Google's Receivers Have a "Local Playback Queue"



SC-GOOG-SONOSNDCA-001290

HIGHLY-CONFIDENTIAL – SOURCE CODE

Google's Receivers Have a "Local Playback Queue"

On Mon, Feb 3, 2020 at 4:36 PM Ali Mills <amills@google.com> wrote:

[REDACTED]
[REDACTED] seems to be caused by two things.

First, it has to do with the fact that when [REDACTED]

[REDACTED] jharding@ would like it to prefer the [REDACTED]

Second, it may have to do with the fact that [REDACTED] can retain a [REDACTED] I don't know much about this, but Chaoren told me this can happen. It sounds like the queue is [REDACTED]

[REDACTED] -- and just wanted to shoot you all a heads up since Harding filed the bug.

GOOG-SONOSNDCA-00072008, 2009

On Thu, Sep 17, 2015 at 10:54 AM, Christopher Patnoe <patnoe@google.com> wrote:

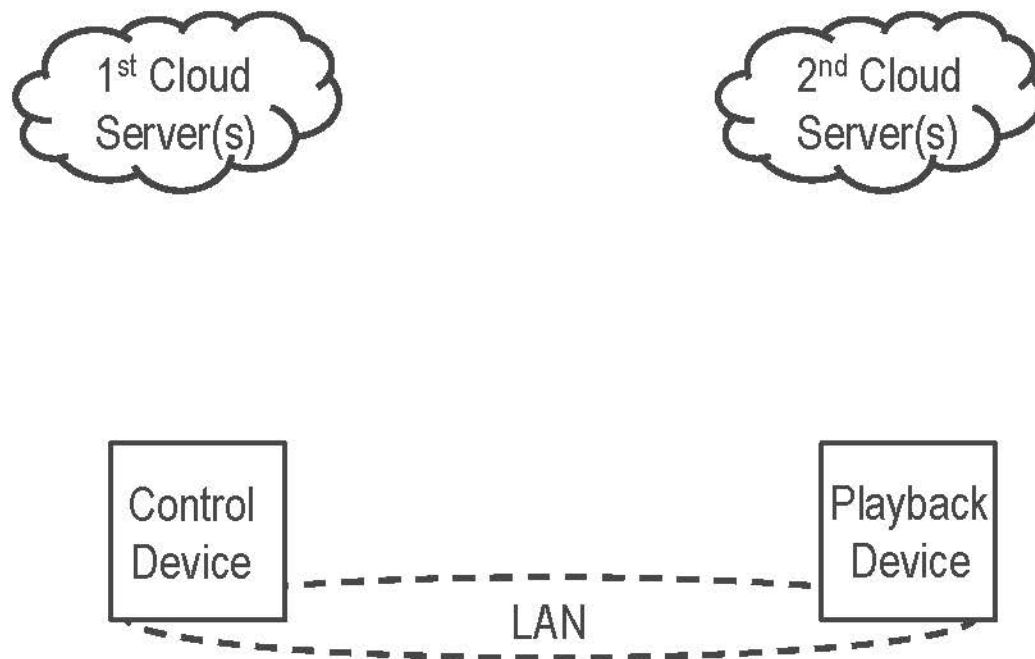
It's working as expected (which is sub-optimal) with the version of the software you have. What happened is that you were disconnected from your Hendrix and that's why these problems occurred. That is the common thread with both of your concerns:

C

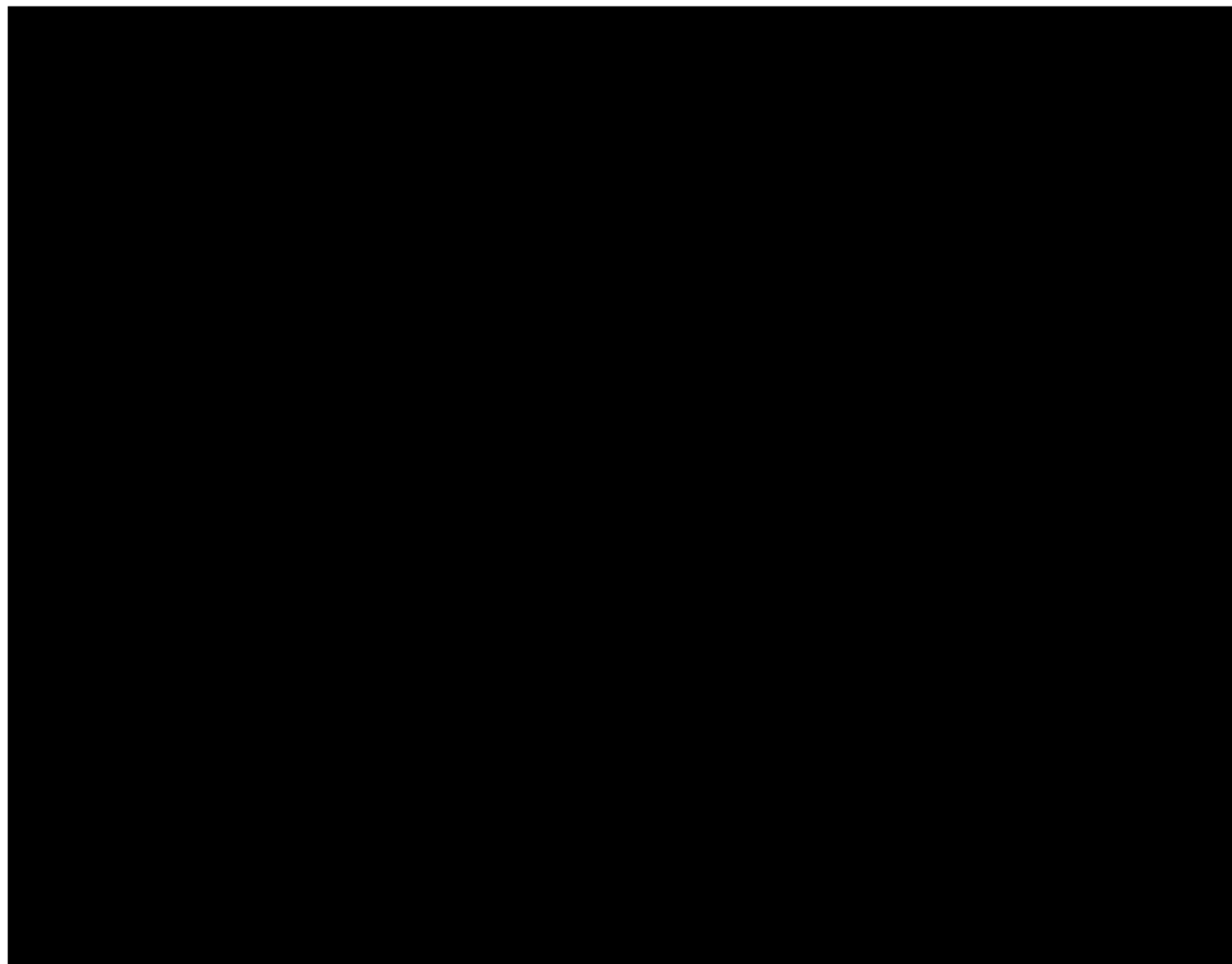
GOOG-SONOS-NDCA-00075833

HIGHLY-CONFIDENTIAL – ATTORNEYS' EYES ONLY

Google's YouTube Instrumentalities Satisfy Limitation 13.5(a)

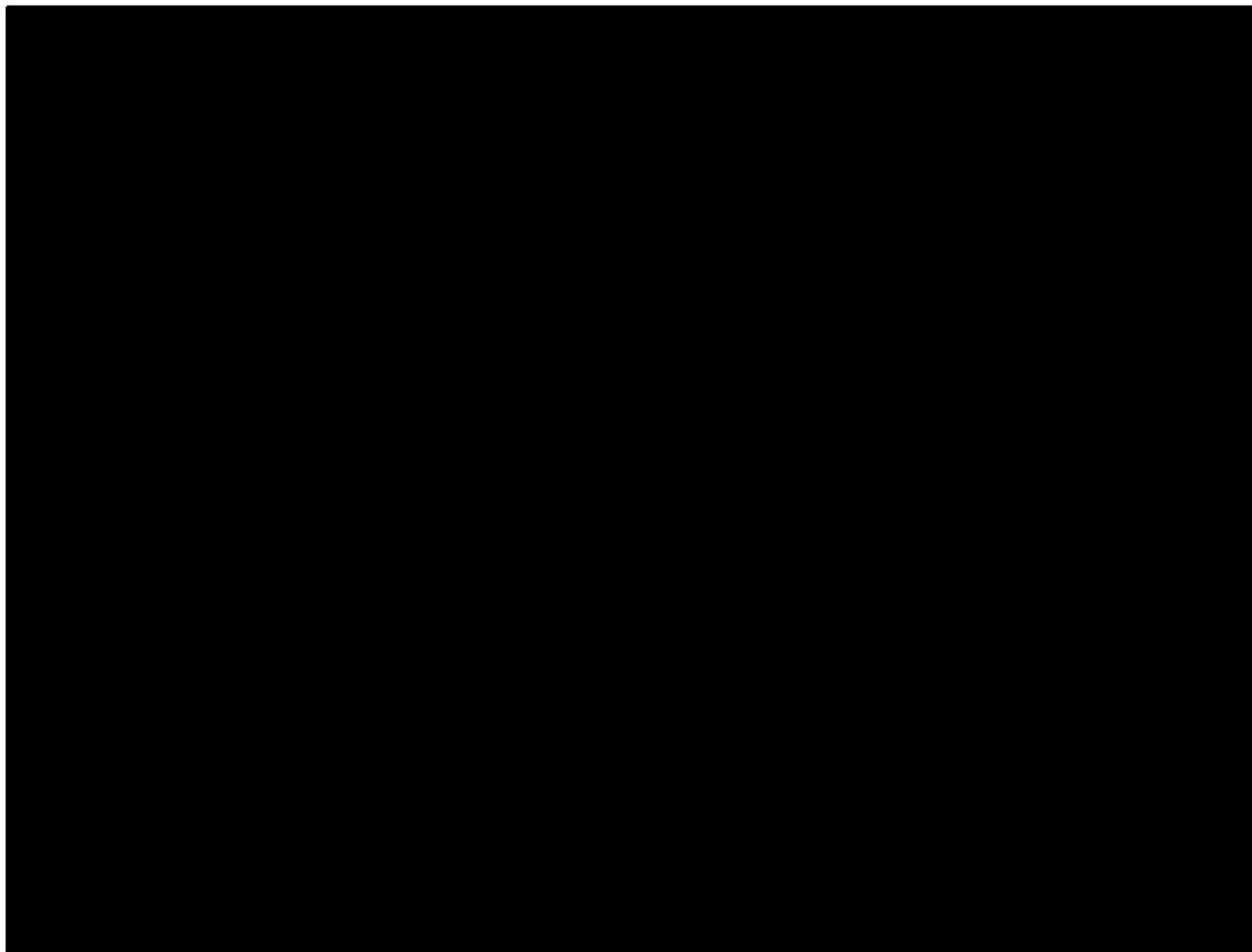


Google's YouTube Instrumentalities Satisfy Limitation 13.5(a)



See Ex. 1 (Schmidt Decl.), ¶¶61-68

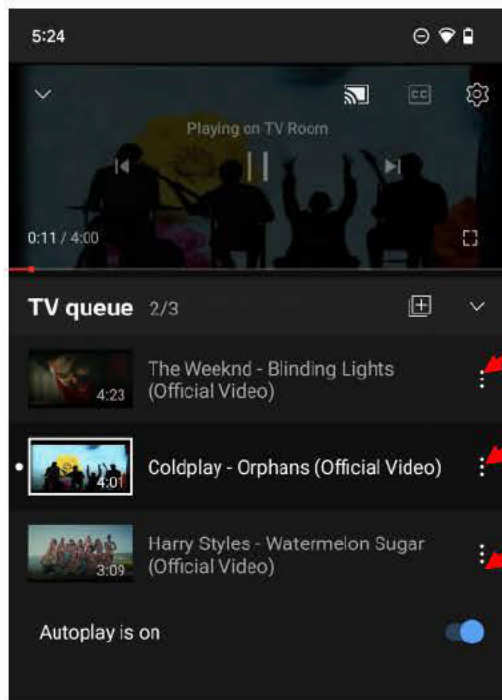
Google's YouTube Instrumentalities Satisfy Limitation 13.5(a)



See Ex. 1 (Schmidt Decl.), ¶¶61-68

HIGHLY-CONFIDENTIAL – ATTORNEYS' EYES ONLY

Google's YouTube Instrumentalities Satisfy Limitation 13.5(a)



See Ex. 1 (Schmidt Decl.), ¶¶65-67

HIGHLY-CONFIDENTIAL – ATTORNEYS' EYES ONLY

Google's YouTube Receiver Has "Local Playback Queue"

- Resource locators are added to Receiver's "playback queue" when Casting YouTube
 - #1: current videoId data construct
 - #2: current and next videoId data constructs
 - #3: WatchNextResponse data construct containing multiple videoIds
- Even under Google's construction, YouTube infringes literally and under Doctrine of Equivalents
 - Literal: WatchNextResponse data construct
 - DoE: current and next videoId data constructs

See Ex. 1 (Schmidt Decl.), ¶¶69-71, 75-81

Google's Arguments All Fail or Show Factual Disputes



See Ex. 1 (Schmidt Decl.), ¶¶69-71, 75-81

HIGHLY-CONFIDENTIAL – ATTORNEYS' EYES ONLY

Google's Arguments All Fail or Show Factual Disputes

- In reply, Google argues, “[a]t best, Sonos has shown that the receiver stores individual items from the playback queue” and “[q]ueues can be hundreds of media items long” Reply, 2.
 - Indisputable that a “Cloud Queue” could only be 1, 2, or 3 media items long
 - In such instance, indisputable that Receiver can store, at time of Casting, *complete* set of items that it is set to playback

See Ex. 1 (Schmidt Decl.), ¶¶65-67

Google's Arguments All Fail or Show Factual Disputes

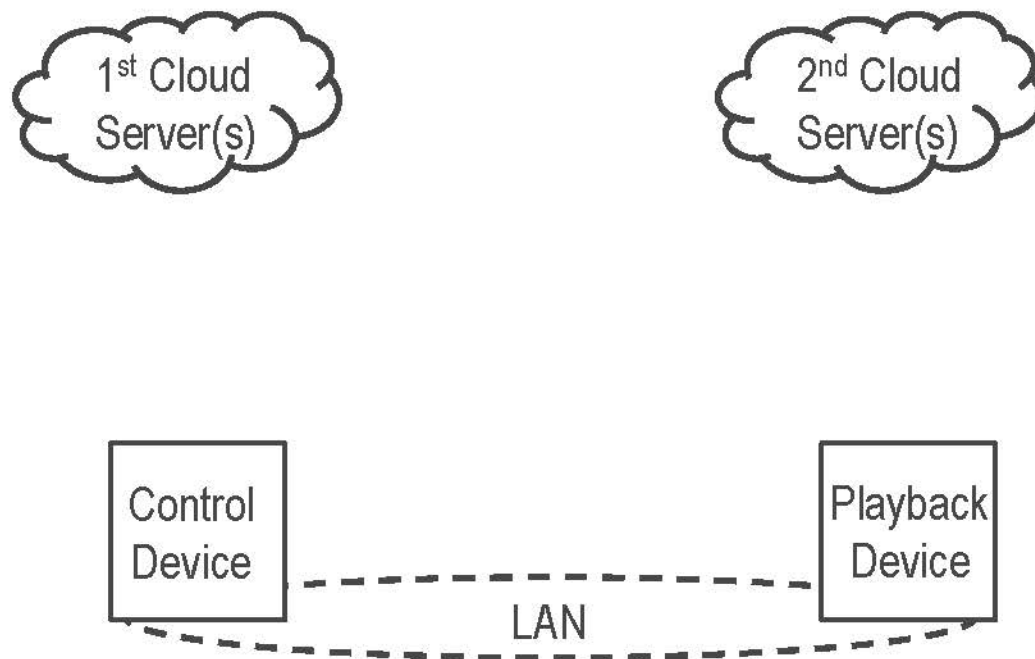
- In reply, Google incorrectly contends Sonos mischaracterizes the '615 Patent's teachings
- The '615 Patent teaches how a playback device “periodically fetches a short list of tracks” from an “application-specific queue” that are then loaded into the playback device’s “local playback queue.”

Certain embodiments allow a third party application to *override* a *local playback queue* with its own *application-specific queue*. The *local playback system* periodically *fetches a short list of tracks* to play next. The list of *tracks* to play is *determined by the third-party application*, for example. '615 Patent, 16:63-17:1.

See Ex. 1 (Schmidt Decl.), ¶¶90-92

Case 3:20-cv-06754-WHA Document 318-1 Filed 08/05/22 Page 69 of 126

Google's GPM Instrumentalities Satisfied Limitation 13.5(a)



Google's GPM Instrumentalities Satisfied Limitation 13.5(a)



See Ex. 1 (Schmidt Decl.), ¶¶83-85

Google's GPM Receiver Had "Local Playback Queue"

- [REDACTED]
- [REDACTED]
- GPM literally infringed even under Google's construction

See Ex. 1 (Schmidt Decl.), ¶86

HIGHLY-CONFIDENTIAL – ATTORNEYS' EYES ONLY

“Resource Locator(s)” Are Added to the Local Playback Queue

13[pre]. A tangible, non-transitory computer readable storage medium including instructions for execution by a processor, the instructions, when executed, cause a control device to implement a method comprising:

...

13.5 after detecting the set of inputs to transfer playback from the control device to the particular playback device, causing playback to be transferred from the control device to the particular playback device, wherein transferring playback from the control device to the particular playback device comprises:

- (a) causing one or more first cloud servers to add multimedia content to a local playback queue on the particular playback device, wherein adding the multimedia content to the local playback queue comprises the one or more first cloud servers adding, to the local playback queue, *one or more resource locators* corresponding to respective locations of the multimedia content at one or more second cloud servers of a streaming content service;
- (b) causing playback at the control device to be stopped; and
- (c) modifying the one or more transport controls of the control interface to control playback by the playback device; and

13.6 causing the particular playback device to play back the multimedia content, wherein the particular playback device playing back the multimedia content comprises the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content.

Google's Construction for "Resource Locator" Is Flawed

- Google: "address of a resource on the Internet"
- Google's proposed construction has numerous flaws
 - Premised on re-writing express claim language from "one or more resource locators" to "one or more uniform resource locators" (or URLs)
 - Limiting to an "address" excludes embodiments
 - Too narrow even if express claim language was "one or more URLs"

Limiting to an “Address” Excludes Embodiments

A playback device, such as a zone player, can fetch content on its own without use of a controller, for example. Once the zone player has a URL (or **some other identification** or address) for a song and/or playlist, the zone player can run on its own to fetch the content. Songs and/or other multimedia content can be retrieved from the Internet '615 Patent, 12:53-63.

[A]n application can pass **a song identifier** to a local playback system which looks up the song identifier and finds an available audio stream to which the user has a right to play and then plays that song. *Id.*, 13:36-40.

Information passed over to the local playback device may include **an identifier** for a single track, a playlist, a streaming radio station, a programmed radio station, and so on.... Once the **music information** is handed from the third-party application to the local playback system, there is no further synchronization between the two systems. *Id.*, 15:59-67.

Too Narrow Even If Claim Recited One or More “URLs”

- Google’s construction is premised on assertion that “a POSITA would understand ... that here a ‘resource locator’ is not distinct and different from a URL, it is simply a shorthand for a URL.” *D.I. 200*, 24.
- Yet, not all URLs provide an “address of a resource on the Internet”
 - Certain URLs merely point to intermediate resolution service that translates URL into actual address of resource
- *ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1092-93 (Fed. Cir. 2003) (explaining the term “URL” is met “so long as it provides **sufficient information** for the system **to identify** a [resource]” and finding “**file names** that identify specific information stored on ... servers” amounted to URLs).

Dependent Claim 20 Specifies One Type of Resource Locator

13.5 (a) causing one or more first cloud servers to add multimedia content to a local playback queue on the particular playback device, wherein adding the multimedia content to the local playback queue comprises the one or more first cloud servers adding, to the local playback queue, *one or more resource locators corresponding to respective locations* of the multimedia content at one or more second cloud servers of a streaming content service;

20[pre]. The tangible, non-transitory computer readable medium of claim 13,

20.1 wherein causing the one or more first cloud servers to add multimedia content to the local playback queue on the particular playback device comprises causing *an identifier of the multimedia content* to be added to the local playback queue,

20.2 wherein *the identifier indicates a particular source of the multimedia content* at the one or more second cloud servers of the streaming content service,

20.3 wherein the particular playback device receives the multimedia content from the particular source at the one or more second cloud servers of the streaming content service.

Google's YouTube Instrumentalities Use "Resource Locators"

- Plain and ordinary meaning of "resource locator"
 - Information that enables a device to access a resource (Ex. 1 (Schmidt Decl.), ¶118)

➤ [REDACTED]

- Google's arguments to the contrary are inconsistent with Google's claim construction briefing (*D.I. 200*, 24-25):

[REDACTED] Sonos argues that "a POSITA would have known that certain types of [REDACTED] But a PURL would *still point, indirectly*, to a location of a [REDACTED]

➤ [REDACTED]

See Ex. 1 (Schmidt Decl.), ¶119

Google's YouTube Instrumentalities Use "Resource Locators"

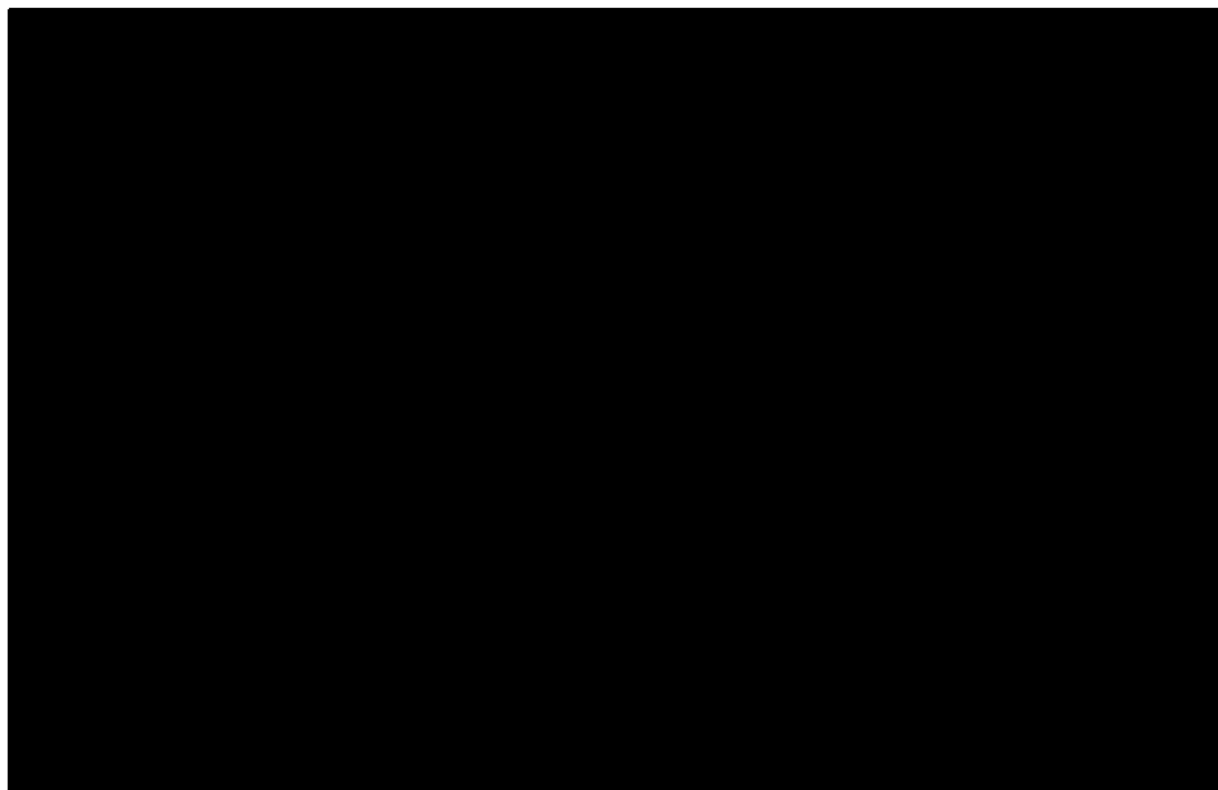
- Even under Google's construction, YouTube infringes literally and under Doctrine of Equivalents

- Literal:

- DoE:

See Ex. 1 (Schmidt Decl.), ¶¶121-22

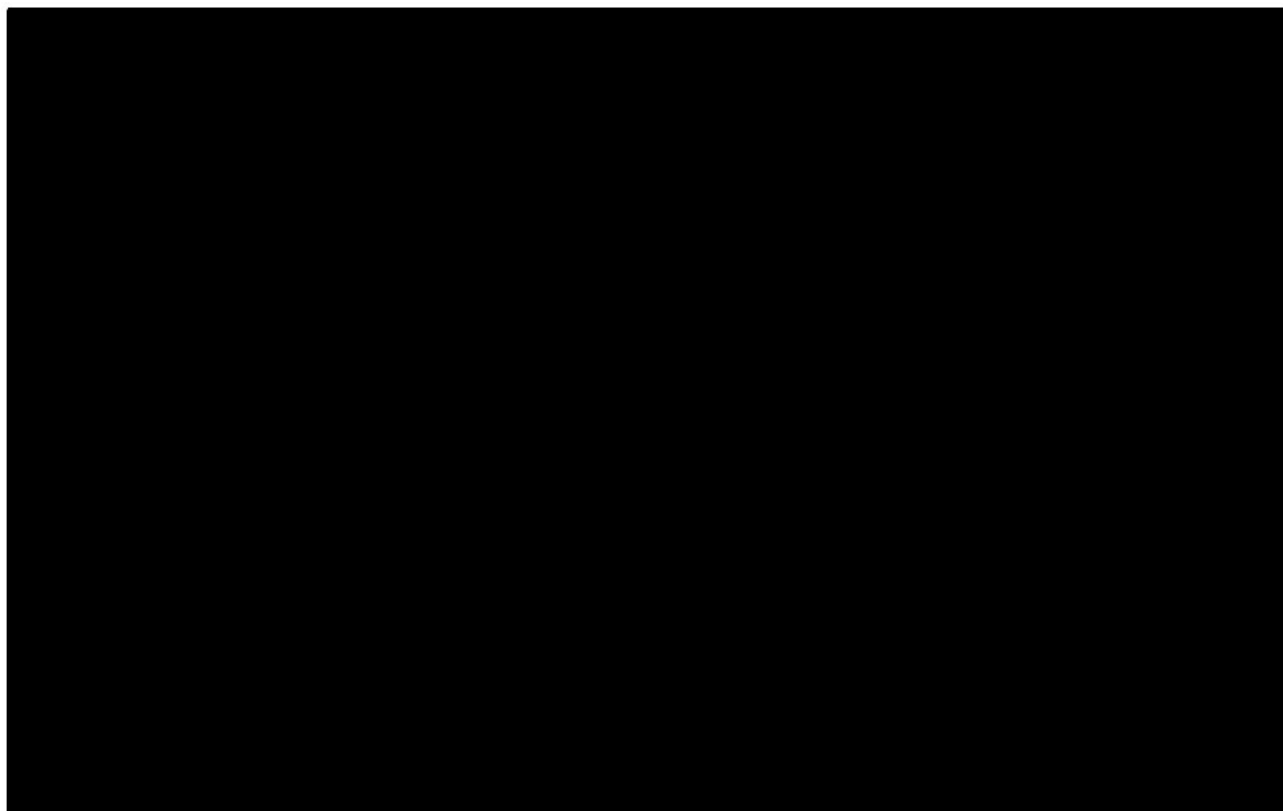
Google's YouTube Instrumentalities Use "Resource Locators"



See Ex. 1 (Schmidt Decl.), ¶¶61-62

HIGHLY-CONFIDENTIAL – ATTORNEYS' EYES ONLY

Google's YouTube Instrumentalities Use "Resource Locators"



See Ex. 1 (Schmidt Decl.), ¶¶68, 119

HIGHLY-CONFIDENTIAL – ATTORNEYS' EYES ONLY

Limitation 13.5 Does Not Require Adding Media Files

13[pre]. A tangible, non-transitory computer readable storage medium including instructions for execution by a processor, the instructions, when executed, cause a control device to implement a method comprising:

...

13.5 after detecting the set of inputs to transfer playback from the control device to the particular playback device, causing playback to be transferred from the control device to the particular playback device, wherein transferring playback from the control device to the particular playback device comprises:

- (a) causing one or more first cloud servers to *add multimedia content* to a local playback queue on the particular playback device, *wherein adding the multimedia content* to the local playback queue *comprises* the one or more *first cloud servers adding, to the local playback queue, one or more resource locators* corresponding to respective locations of the multimedia content at one or more second cloud servers of a streaming content service;
- (b) causing playback at the control device to be stopped; and
- (c) modifying the one or more transport controls of the control interface to control playback by the playback device; and

13.6 causing the particular playback device to play back the multimedia content, wherein the particular playback device playing back the multimedia content comprises the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content.

Limitation 13.5 Does Not Require Adding A Media File

- Limitation 13.5(a)'s "wherein" clause specifies how the "one or more first cloud servers" are to "add multimedia content to a local playback queue."
- Claim 13 as a whole informs a POSITA that the plain and ordinary meaning of limitation 13.5 does not require adding a media file
- Clear from '615 Patent's disclosure and file history

- Limitation 13.5(a)'s “wherein” clause specifies how the “one or more first cloud servers” are to “add multimedia content to a local playback queue.”
 - A “wherein” clause gives meaning and purpose to a claimed function that it modifies. *See, e.g., Griffin v. Bertina*, 285 F.3d 1029, 1033 (Fed. Cir. 2002).
 - Transitional word “comprises” is synonymous with “characterized by.” *See* MPEP § 2111.03.

See Ex. 1 (Schmidt Decl.), ¶113

Limitation 13.5 Does Not Require Adding A Media File

- Claim 13 as a whole informs a POSITA that the plain and ordinary meaning of limitation 13.5 does not require adding a media file

13.5 after detecting the set of inputs to transfer playback from the control device to the particular playback device, causing playback to be transferred from the control device to the particular playback device, wherein transferring playback from the control device to the particular playback device comprises:

- (a) causing one or more first cloud servers to *add multimedia content* to a *local playback queue on the particular playback device*, wherein adding the multimedia content to the local playback queue comprises the one or more *first cloud servers adding, to the local playback queue, one or more resource locators* corresponding to respective locations of the multimedia content at one or more second cloud servers of a streaming content service;

...

13.6 causing the particular playback device to play back the multimedia content, wherein the particular playback device playing back the multimedia content comprises *the particular playback device retrieving the multimedia content from one or more second cloud servers* of a streaming content service and playing back the retrieved multimedia content.

See Ex. 1 (Schmidt Decl.), ¶114

Limitation 13.5 Does Not Require Adding A Media File

➤ Clear from '615 Patent's disclosure and file history

A uniform resource indicator (URI) (e.g., a uniform resource locator (URL)) can be passed to a *playback device to fetch content from a cloud* A playback device, such as a zone player, can fetch content on its own without use of a controller Once the zone player has *a URL (or some other identification or address)* for a song and/or playlist, the *zone player can run on its own to fetch the content*. Songs and/or other multimedia content can be *retrieved from the Internet* '615 Patent, 12:53-63.

[Z]one player 602 may contain a uniform resource locator (URL) that specifies an address to a particular audio track in the cloud. Using the URL, *the zone player* 602 may *retrieve the audio track from the cloud*, and ultimately play the audio out of one or more zone players. *Id.*, 11:65-12:3.

See Ex. 1 (Schmidt Decl.), ¶¶ 115-16

Limitation 13.5 Does Not Require Adding A Media File

➤ Clear from '615 Patent's disclosure and file history

Instead of requesting a content server to change the destination of the audio content. [as in the prior art], Applicant's claims recite a different technique for transferring playback of multimedia content between devices. In particular, Applicant's claims recite "causing one or more first cloud servers to **add the multimedia content** to a local playback queue on the particular playback device" **by "adding,** to the local playback queue, **one or more resource locators** corresponding to respective locations of the multimedia content at the one or more second cloud servers of a streaming content service."

August 28, 2017 Office Action Response (D.I. 185-8, App'x B, 4)

See Ex. 1 (Schmidt Decl.), ¶¶ 115-16

Limitation 13.5 Does Not Require Adding A Media File

➤ Contradicted by Google's claim construction expert

Q: So it's possible that songs included in a playlist can be stored in either its data form, its MP3 file form, or as a resource locator or a URL form; correct?

A: Yes.

Q: Here you opine that "a person of skill in the art would have understood that a playback queue is an ordered list of multimedia items that is selected by the user for playback." Do you see that?

A: Yes.

Q: What is a multimedia item?

A: In the context of what we're talking here today, it's a song, a video, **a link to** a song or video....

Q: When you say "a link to a song or video," does that mean that a playback queue **doesn't have to contain the actual song or video in its data form**?

A: **Yes**, just as I answered it for playlist, **I think that's right**.

Dr. Kyriakakis Dep. Tr., 23:12-16, 24:2-19 (D.I. 185-9)

**YOUTUBE REMOTE (YTR) DOES
NOT INVALIDATE THE '615 PATENT**

13[pre]. A tangible, non-transitory computer readable storage medium including instructions for execution by a processor, the instructions, when executed, cause a *control device* to implement a method comprising:

- [13.1] causing a graphical interface to display a control interface . . . ;
- [13.2] *after connecting to a local area network via a network interface, identifying playback devices connected to the local area network;*
- [13.3] causing the graphical interface to display a selectable option for transferring playback . . . ;
- [13.4] *detecting a set of inputs to transfer playback from the control device to a particular playback device, wherein the set of inputs comprises: (i) a selection of the selectable option for transferring playback from the control device and (ii) a selection of the particular playback device from the identified playback devices connected to the local area network;*
- [13.5] after detecting the set of inputs to transfer playback from the control device to the particular playback device, *causing playback to be transferred from the control device to the particular playback device, wherein transferring playback from the control device to the particular playback device comprises:*
 - (a) causing one or more first cloud servers to add multimedia content to a local playback queue on the particular playback device . . . ;
 - (b) *causing playback at the control device to be stopped;* and
 - (c) modifying the one or more transport controls of the control interface to control playback by the playback device; and
- [13.6] *causing the particular playback device to play back the multimedia content*

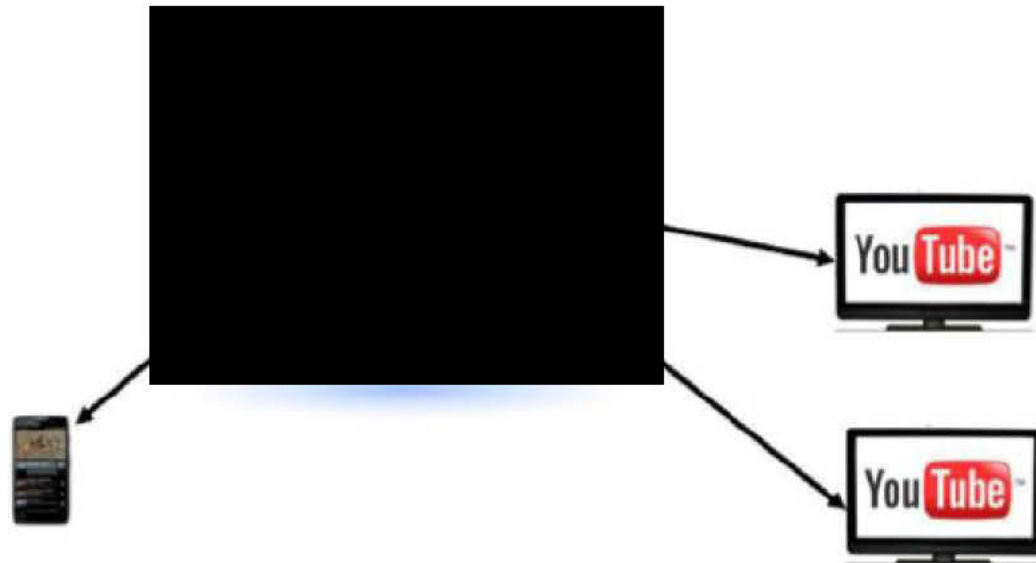
YTR Does Not Disclose Limitation 13.2 of the '615 Patent

Limitation 13.2: after connecting to a local area network via a network interface, identifying playback devices connected to the local area network

- Limitation 13.2 requires “after connecting to a [LAN] via a network interface, identifying playback devices connected to the [LAN].”
- The plain language requires the “control device” to not only identify playback devices, but also to identify playback devices that are connected to the same LAN as the control device.
- The YTR app does not teach this limitation.

YTR Uses a Fundamentally Different Pairing Mechanism

- YTR operated by connecting to logged-in playback devices, not discovered devices on the local area network (LAN).

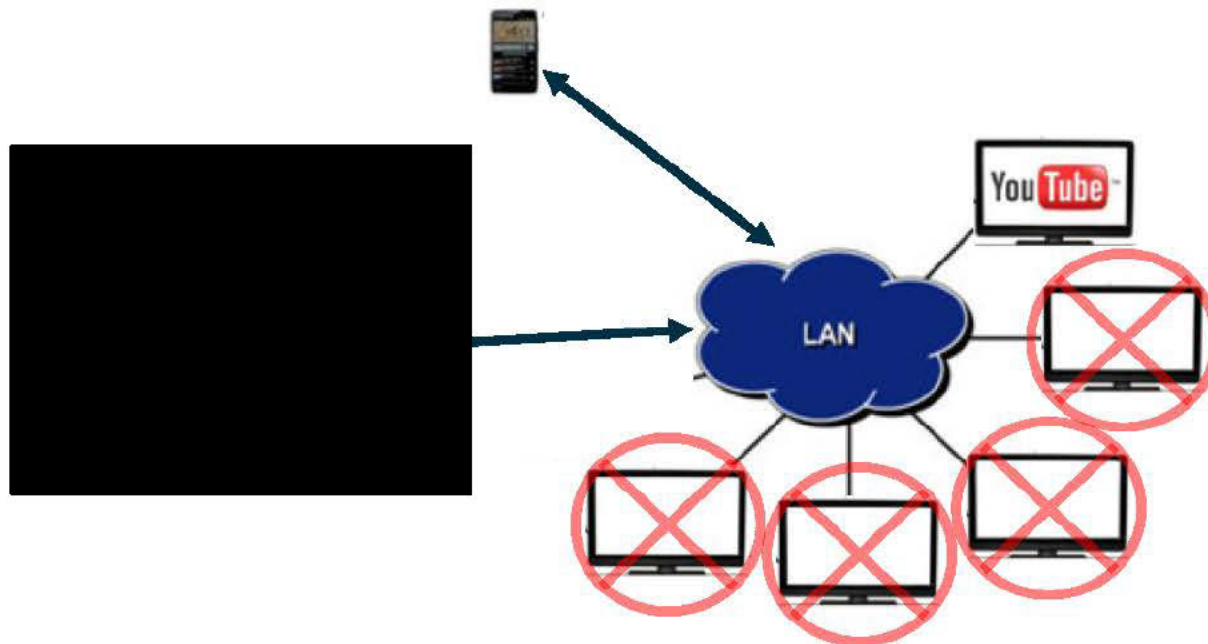


- One of the touted benefits of this account-based architecture was that YTR pairing could be accomplished through a wide area network (WAN), such as a 3G cellular network.

Sonos MSJ Opp. (Dkt. 252.03), Ex. 14 (Levai Dep. Tr.), 94:2-21; Ex. 1 (Schmidt Decl.), ¶ 128; '998 Patent, 4:51-55.

YTR Uses a Fundamentally Different Pairing Mechanism

- One of the disadvantages to this account-based architecture was that pairing could **not** be accomplished with playback devices on a LAN unless they were logged into YouTube.



- In other words, YTR had no way of discovering or identifying playback devices on a LAN.

Sonos MSJ Opp. (Dkt. 252.03), Ex. 1 (Schmidt Decl.), ¶¶ 161, 168, 176.

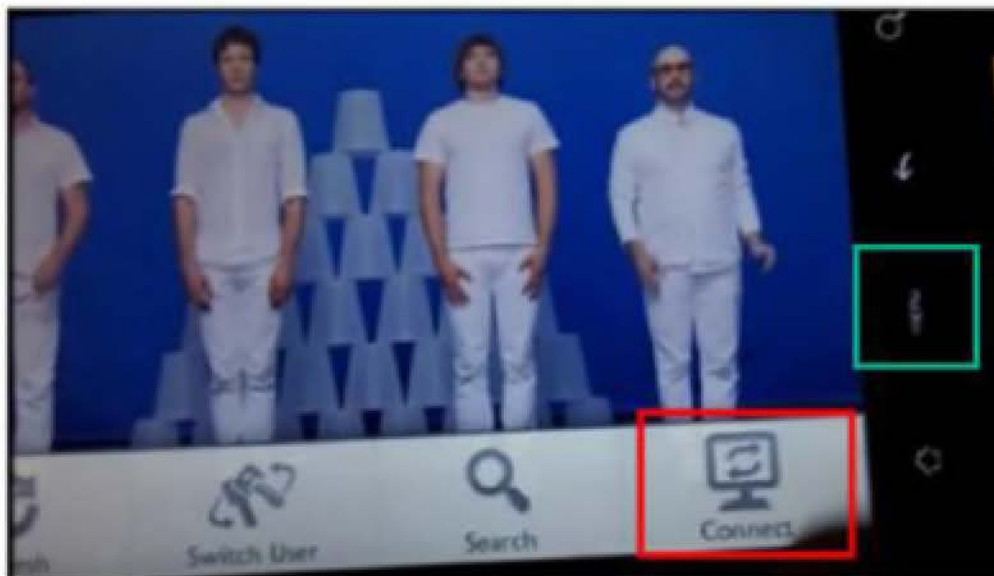
YTR Does Not Disclose Limitation 13.4 of the '615 Patent

Limitation 13.4: detecting a set of inputs to transfer playback from the control device to a particular playback device, wherein the set of inputs comprises: (i) a selection of the selectable option for transferring playback from the control device and (ii) a selection of the particular playback device from the identified playback devices connected to the local area network

- The plain language of limitation 13.4 requires at least two separate and distinct inputs to transfer playback from the control device to a particular playback device:
 - (i) a selection of the selectable option for transferring playback from the control device and
 - (ii) a selection of the particular playback device from the identified playback devices connected to the LAN.
- The YTR app does not teach the two required inputs of this limitation.

YTR Does Not Disclose Limitation 13.4 of the '615 Patent

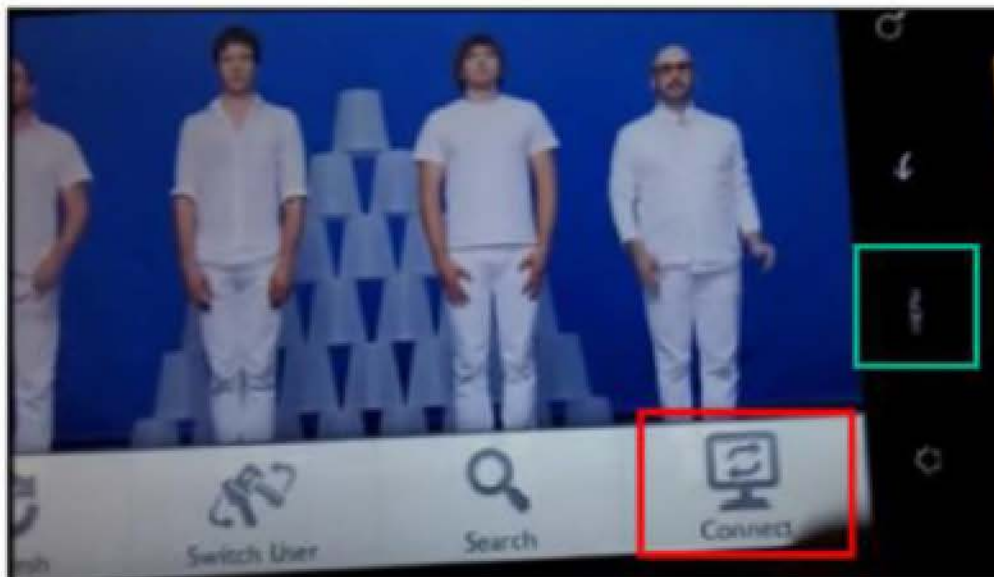
- Selection of the “menu” button – shown below in green – does not meet either of the required inputs.



- It is not a button for transferring playback or a button for selecting a particular playback device.
- Instead, the “menu” button does exactly what its name describes, it simply activates a “menu” on the YTR app.

YTR Does Not Disclose Limitation 13.4 of the '615 Patent

- The only other input identified by Google is the input received via selection of the “Connect” button – shown below in red.



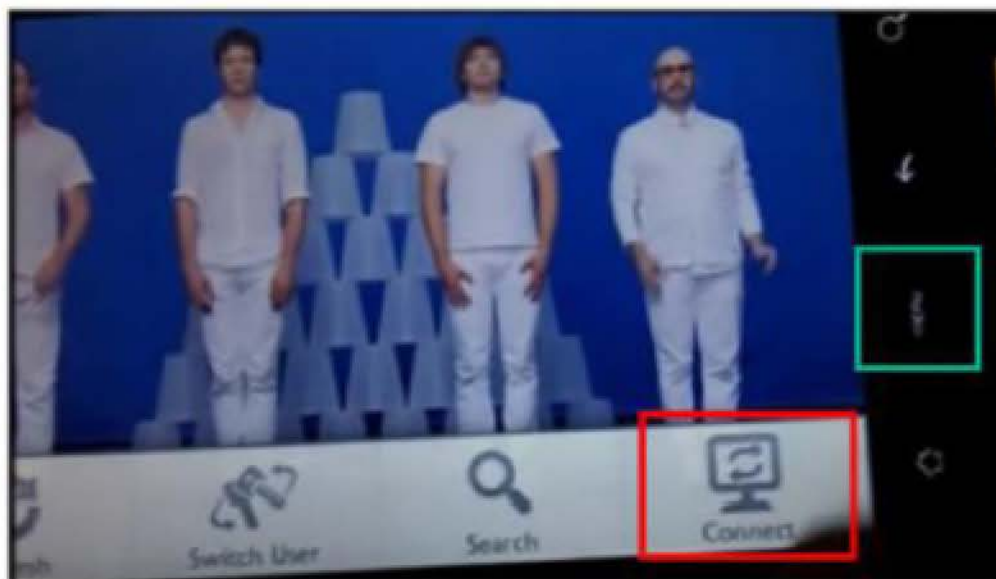
- However, a single input via the “Connect” button cannot satisfy the two separate and distinct inputs of limitation 13.4.

See In re Robertson, 169 F.3d 743, 745 (Fed. Cir. 1999)

Sonos MSJ Opp. (Dkt. 252.03), Ex. 1 (Schmidt Decl.), ¶ 153.

YTR Does Not Disclose Limitation 13.4 of the '615 Patent

- A selection of “Connect” is not “a selection of the particular playback device from the identified playback devices connected to the [LAN].” It does not even provide an indication of any particular playback device.



- The “Connect” button simply provides a connection to all the playback devices that are logged into YouTube.

Sonos MSJ Opp. (Dkt. 252.03), Ex. 1 (Schmidt Decl.), ¶¶ 154-156.

YTR Does Not Disclose Limitation 13.5 of the '615 Patent

Limitation 13.5: after detecting the set of inputs to transfer playback from the control device to the particular playback device, causing playback to be transferred from the control device to the particular playback device, wherein transferring playback from the control device to the particular playback device comprises: ... (b) causing playback at the control device to be stopped

- The November 14, 2010 video relied on by Google shows that the media on the phone's screen is *not* "stopped," but rather, appears to still be in a playback state (paused) both before (left) and after (right) the alleged "transfer" of playback.



Sonos MSJ Opp. (Dkt. 252.03), Ex. 1 (Schmidt Decl.), ¶ 153 n.28.

YTR Does Not Disclose Limitation 13.5 of the '615 Patent

1 Sonos also argues that the YTR product cannot invalidate because the phone merely
2 “pauses” the playback state when it transfers video to the screen rather than “stopping” that video.
3 Opp. at 18. Sonos does not cite any evidence drawing a distinction between “stopping” and
4 “pausing,” and the '615 certainly includes no such distinction.

Google MSJ Reply (Dkt. 267.03) at 15.

- There is absolutely a difference between “stopped” and “paused,” which are different actions with different corresponding buttons.

Stop Button on Google Android 11.0 Pause Button on Google Android 11.0



- Even if there is no distinction between “stop” and “pause,” the point here is that YTR is paused/stopped both before and after the alleged transfer, so nothing has been “stopped.”
- You cannot stop something that is already stopped.

YTR Cannot Be Combined with Google's Other Prior Art

- The '998 Patent, the Tungsten system, the Al-Shaykh Publication, Apple's AirPlay, and Sonos's alleged prior art products do not disclose any “*transfer* [of] *playback* from the control device to a particular playback device.”
- Instead, Google's evidence for these references at most shows that a control device could be used to *control playback* on one or more playback devices (*e.g.*, forwarding or reversing playback) or for *streaming media content* from the control device to a playback device.

Sonos MSJ Opp. (Dkt. 252.03), Ex. 1 (Schmidt Decl.), ¶ 160.

YTR Cannot Be Combined with Google's Other Prior Art

- As required by Claim 13, the control device has to be capable of being in a playback state when it “detect[s] a set of inputs to transfer playback” and thereafter “caus[es] playback to be transferred from the control device to the particular playback device,” which includes, *inter alia*, “causing playback at the control device to be stopped” and “causing the particular playback device to play back the multimedia content.”
- “***Transferring*** playback” from a “control device” to a “particular playback device” as recited in Claim 13 is ***not*** met by merely ***streaming*** media content from a control device to a playback device.

Sonos MSJ Opp. (Dkt. 252.03), Ex. 1 (Schmidt Decl.), ¶ 160

YTR Cannot Be Combined with Google's Other Prior Art

- Just like the YTR app, the '998 Patent does not disclose a “control device” “identifying playback devices connected to the [LAN],” as required by limitation 13.2.
- Instead, it uses an account-based pairing mechanism via an intermediary cloud server referred to as the “network service”:

Remote controls and controlled devices may be paired using any one of several different techniques. As one example, a user may maintain a user account using the network service, and the remote controls and controlled devices may be associated with the user account. For example, upon connecting to a network service, the remote controls and controlled devices may notify the network service that the remote controls and controlled devices are connected to the network. The network service may, in some examples, determine whether the remote controls and controlled devices are authorized to be associated with the user account. If authorized, the network service initiates a session and assigns the remote controls and controlled devices unique identification numbers. The network service uses the unique identification numbers for pairing during a session.

'998 Patent at 4:21-35; Sonos MSJ Opp. (Dkt. 252.03), Ex. 1 (Schmidt Decl.), ¶ 175.

YTR Cannot Be Combined with Google's Other Prior Art

- Just like the YTR app, the '998 Patent touts reliance on an architecture that enables the “remote control” and “controlled device[s]” to be paired through a log-in session while “not need[ing] to be connected to the same [LAN], nor in physical proximity to each other.”

Using the network service to transmit and receive messages between a remote control and a controlled device may
50 enable non-traditional devices having rich input and display capabilities to act as a remote control. In addition, by using the network service as an intermediary, the remote control and the controlled device, in various instances, may not need to be connected to the same local area network, nor in
55 physical proximity to each other. The network service may also enable pairing of a nearly limitless number of remote controls and controlled devices.

'998 Patent at 4:51-55; Ex. 1 (Schmidt Decl.), ¶ 176

YTR Cannot Be Combined with Google's Other Prior Art

- Unlike the YTR app, Apple AirPlay utilized a fundamentally different system architecture that required an AirPlay control device to be on the same LAN (Wi-Fi) as the AirPlay playback device.
- Google's "co-owner" of YTR and summary judgment motion declarant, Janos Levai, admits that [REDACTED]

Sonos MSJ Opp. (Dkt. 252.02), Ex. 16 (GOOG-SONOSNDCA-00075593) at 96.

YTR Cannot Be Combined with Google's Other Prior Art

- Google also admitted that it needed a [REDACTED]
[REDACTED] for YTR that [REDACTED]
[REDACTED]

Sonos MSJ Opp. (Dkt. 252.02), Ex. 16 (GOOG-SONOSNDCA-00075593) at 94.

CONTAINS CONFIDENTIAL MATERIAL

YTR Cannot Be Combined with Google's Other Prior Art

➤ Google further admitted that modifying the [REDACTED]

and [REDACTED]

Sonos MSJ Opp. (Dkt. 252.02), Ex. 16 (GOOG-SONOSNDCA-00075593) at 95.

➤ Thus, a POSITA would not have been motivated to modify the YTR app with AirPlay.

YTR Cannot Be Combined with Google's Other Prior Art

9 way. It is also not necessary that the two products be physically combinable, *see* Opp. at 20, so long
10 as “a skilled artisan could take inspiration from [one] and apply that insight to [the other].” *Pulse*
11 *Elect., Inc. v. U.D. Elect. Corp.*, 860 Fed. App’x 735, 2021 WL 2735013, *3 (Fed. Cir. 2021).

Google MSJ Reply (Dkt. 267.03) at 11.

- Although it may not be fatal to the obviousness analysis, the fact that two products like YTR and Airplay are not physically combinable certainly weighs against a motivation to combine.
- In fact, YTR had no need for selection, as it automatically connected to any device that was previously logged into YouTube.
- This is the antithesis of selection.
- At a minimum, there is a factual dispute regarding motivation to combine that needs to go to the jury.

The December 2011 Source Code is Not Invalidating Prior Art

9 Mot. Ex. 11 at 1, Ex. 14. Second, Sonos suggests that this prior art does not predate Sonos's
10 "uncontested" conception date (Opp. at 18), but Google plainly stated in its invalidity contentions
11 that it is Sonos' burden to show entitlement to its asserted priority dates, and Sonos failed to meet
12 that burden. Sonos does not present any evidence to prove an earlier conception date, despite
13 bearing the burden of proof on that issue.

Google MSJ Reply (Dkt. 267.03) at 12.

- The December 2011 code is dated *after* Sonos's July 15, 2011 invention date for the '615 Patent.
- Google relied on this invention date in its summary judgment motion. *See, e.g.*, Reply Br. at 19 n.7; G.Ex. 1 (Bhatta. Decl.), ¶¶ 19, 23, 124, 126, 170.
- In its Reply, Google points to a statement about Sonos's burden regarding priority dates in its invalidity contentions, which are not part of this motion.
- Sonos provided its contentions regarding this invention date in its responses to Google's Interrogatories Nos. 1-2.

The December 2011 Source Code is Not Invalidating Prior Art

- Even if Google's December 2011 source code did qualify as prior art, and even if the source code permitted selection of a particular playback device for playback transfer, it did not disclose, *inter alia*, "identifying playback devices connected to the [LAN]," as required by limitation 13.2.
- There is no evidence that the December 2011 source code operated any differently than the November 2010 version of YTR, which merely connected to playback devices that were logged into YouTube.

The December 2011 Source Code is Not Invalidating Prior Art

- Google did not add the ability to identify LAN devices for playback transfer until it released its DIAL technology in 2013.

The technology: What DIAL is all about

DIAL stands for “discovery and launch,” which pretty much sums up what the protocol is meant to do. DIAL-enabled second screen apps will be able to discover DIAL-ready first-screen devices in the same network and launch apps on them. That may sound trivial, but it’s actually solving a big problem for second screen app developers.

The competition: How DIAL compares to AirPlay

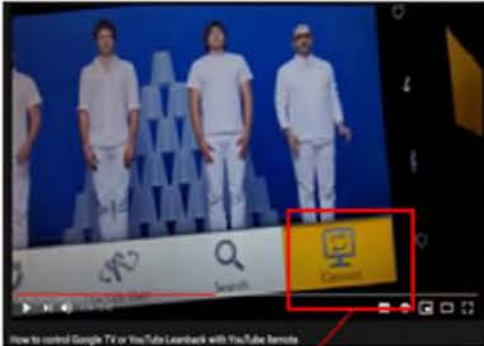

AirPlay is often thought of as a way to mirror content displayed on your iPad or iPhone on your Apple TV, but that’s only part of the puzzle. One key part of AirPlay is device discovery. Any iOS device will immediately discover any AirPlay-capable speaker or Apple TV in your local network. It just works, which is one of the big advantages of AirPlay over competing solutions, and one of the things that DIAL wants to achieve.

<https://old.gigaom.com/2013/01/23/dial-open-airplay-competitor/>
(SONOS-SVG2-00224822-23)

SONOS' MOTION TO STRIKE

The Court Should Strike Google's New "Menu + Connect" Theory

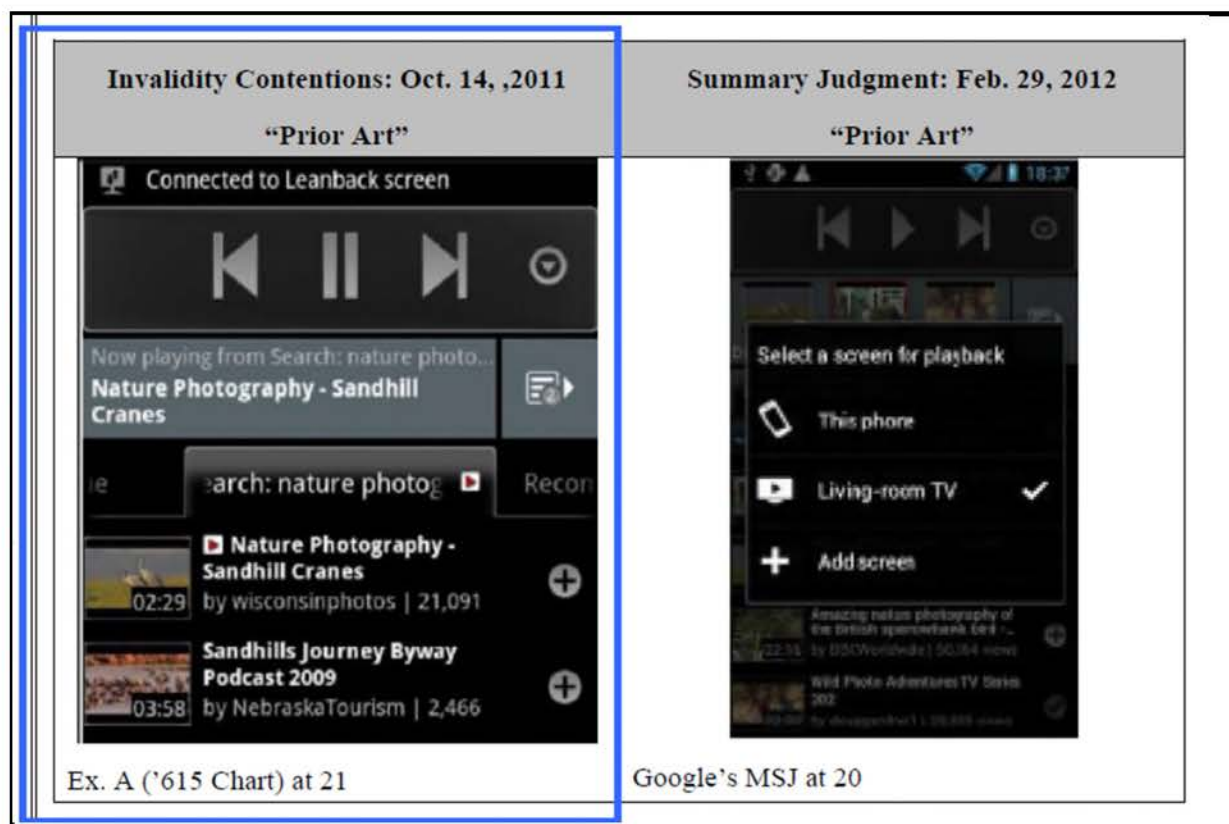
1. Shifted from Connect only to Menu + Connect

Invalidity Contentions	Summary Judgment
<p><u>"The YT Remote System implicitly detects a set of inputs once the 'connect' option is selected," based on devices on the same LAN for which user is logged in, e.g. a TV screen logged into the user's YouTube account.</u></p> <p>See e.g. [4]</p>  <p>Set of inputs detected</p> <p>Ex. A ('615 Chart) at 18 (yellow highlighting in image and emphasis in text added; red box and "Set of Inputs detected" annotation in Google's original).</p>	<p>"To transfer playback using the YTR application the user may press the <i>menu</i> button (shown in green in the image ...) which brings up a '<i>Connect</i>' button (shown in red) that the user may further select to transfer playback to a particular playback device. <u>The user's selection of <i>menu</i> and <i>select</i> [sic] are a 'set of inputs' to transfer playback that are detected by the Android phone.</u>"</p>  <p>Google's MSJ at 19 (emphasis in text added; red and green boxes in image in original).</p>

Sonos MTS (Dkt. 219) at 5.

The Court Should Strike References to a Jan. 25, 2012 Version.

- Now using a Feb. 29, 2012 “Wayback” machine capture to advance an alleged Jan. 25, 2012 version



Sonos MTS (Dkt. 219) at 8.

The Court Should Strike References to Undisclosed Portions of the '998 Patent

3. Now using an undisclosed portion of the '998 Patent

Google's Contentions

See e.g. [8] at 4:21-57:

Remote controls and controlled devices may be paired using any one of several different techniques. As one example, a user may maintain a user account using the network service, and the remote controls and

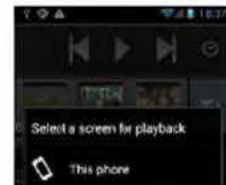
See also [8] e.g. at 8:1-59 (Pairing of remote controls with controlled device).

See e.g. [8] at 4:58-67:

FIG. 1 is a block diagram illustrating an example networked environment 10 with a remote control 14 and controlled device 18, in

Google's MSJ

3 [REDACTED] The YTR Patent expressly discloses that
 4 the "user interface" of the Remote Control may display the "previously paired controlled devices"
 5 so that a user may select and control "one or more paired controlled
 6 devices." YTR Patent at 10:62-11:6; see also *id.* at 8:11-12 ("Remote
 7 controls 62 and controlled devices 64 may be paired using a variety of
 8 techniques"). There can be no genuine dispute that it would have been



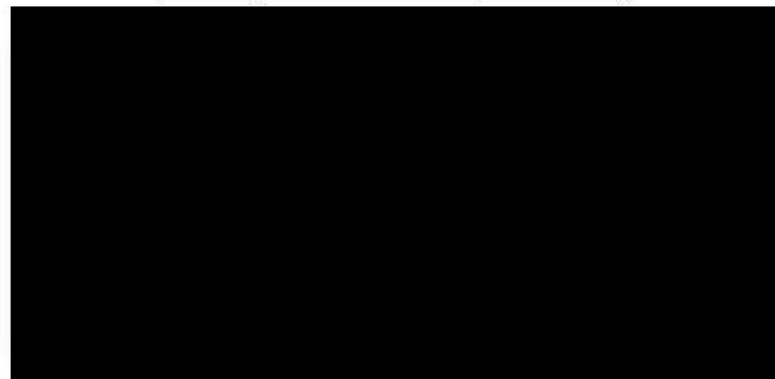
The Court Should Strike References To Undisclosed API Documentation

4. Now using undisclosed API documentation

Google's Contentions

- [1] <https://youtube.googleblog.com/2010/11/control-youtube-on-desktop-or-tv-with.html>, By Kuan Yong, Senior Product Manager, Nov 9, 2010
- [2] <https://www.youtube.com/watch?v=txIPVa6yngQ>, posted Nov 9, 2010
- [3] "Remote Screen pairing - implementation"
- [4] <https://www.youtube.com/watch?v=EGdsOslqG2s>, Nov 14, 2010
- [5] <https://lifehacker.com/remote-control-youtube-on-your-tv-or-computer-from-your-5685752>, Nov 9, 2010
- [6] YouTube Lounge Youbiquity Presentation
- [7] MDx protocol as of 2011, as evidenced by MDx Protocol v2 (12/21/11 at 8:06am)
- [8] US 9,490,998
- [9] <https://web.archive.org/web/20111014181427/https://market.android.com/details?id=com.google.android.ytremote>
- [10] <https://palblog.fxpal.com/?p=4953>, Lean back with YouTube and Android by Surendar Chandra, November 11, 2010 (available at <https://web.archive.org/web/20111106221315/https://palblog.fxpal.com/?p=4953>)
- [11] Engadget Article, YouTube Remote app released, controls Leanback on GTV or PC from your Android phone, November 9, 2010

Google's MSJ (Ex. 10)



The Court Should Strike References to Source Code

5. Now using un-charted and belatedly-produced source code

November 2010 snapshot

- *Not charted in contentions*
- *Produced three months after contentions*

July 2011 snapshot

- *Not charted in contentions*
- *Produced with contentions and then re-produced three months after contentions*

December 2011 snapshot

- *Contentions cite to top-level folders housing the code but do not explain or allege functionality*
- *Produced with contentions*

RESPONSES TO GOOGLE'S JULY 11 SUBMISSION

Sonos Has Said “Playlist” Is Not Same As “Playback Queue”

Despite this, Google’s proposed construction for “playback queue” attempts to narrow the playback queue to one specific kind of data structure for implementation. But there is no basis in the intrinsic or extrinsic evidence to limit a “playback queue” in this way. *See, e.g., Edgewell*, 998 F.3d at 921 (reversing district court’s construction because, “absent an express limitation to the contrary, the term [at issue] should be construed as covering all uses” discussed in the specification). As Dr. Schmidt explained, “an ordered list of multimedia items” is merely one example of a collection of media that can be added to a “playback queue” and the intrinsic evidence makes clear that a “playback queue” is not limited to this specific example. Ex. 9 at ¶¶46-54.

Sonos Opening CC Brief (Dkt. 184), 13

Sonos Has Said “Playlist” Is Not Same As “Playback Queue”

46. As an initial matter, it is my opinion that Google’s proposed construction for “playback queue” – “an ordered list of multimedia items that is selected by the user for playback” – provides a specific example of a type of arranged multimedia content that could be contained in a “playback queue” but fails to articulate a POSITA’s understanding of the term “playback queue” itself.

47. In this respect, a POSITA would have understood that a “playback queue” is, in more of a colloquial sense,³ a “container” that can hold multimedia for playback and that different types and arrangements of multimedia could be queued, such as a single song or video, a particular Internet radio station, a user-defined playlist of multiple songs/videos, a service-defined playlist of multiple songs/videos, an album of songs, etc. In this way, a POSITA would have appreciated that Google’s proposed construction appears to align more with the phrase “user-defined playlist”⁴ or the like than with the phrase “playback queue.”

Sonos Has Said “Playlist” Is Not Same As “Playback Queue”

The problem is that Google is attempting to limit the term “playback queue” to one specific example of media that can be contained in a “playback queue.” In fact, in taking issue with real-world analogies from Sonos’s Opening Brief, Google gives up the game by expressly stating that Google is limiting the term “playback queue” to “the context of a playlist” (G.Br. 16), despite a “playlist” being merely one example of an arrangement of media that can be added to a “playback queue.” S.Ex. 9¹⁰, ¶¶46-54; *see also* G.Br. 11 (conflating disclosure regarding a user navigating a “playlist” with what a “playback queue” is). Google ignores the numerous embodiments found in the Direct Control specification in which something other than “an ordered list of multimedia items that is selected by the user” is queued, all of which would be impermissibly excluded if Google’s proposed construction were adopted. S.Ex. 9, ¶¶48-49.

Sonos Reply CC Brief (Dkt. 184), 8

BACKUP SLIDES

Improved Functioning vs. Abstract Idea

Improved functioning of a computer or device

- ✓ Tangible limitations tied to specific devices
- Specific improvement to existing networked media devices
- ✓ Controlling specific networked media devices to effect tangible changes in their configuration

Abstract Idea

- ☐ Adding conventional computer components to well-known business practice?
- ☐ Using abstract mathematical formula on any general-purpose computer?
- ☐ Generalized steps to be performed on a computer using conventional computer activity?

Claim 1 is Patent-Eligible Under *Alice* and Progeny

✓ Specific improvement to existing technology – not abstract

- Improves over conventional home audio systems
- Improves over Sonos's then-existing system
 - First time you could add a zone player to a group but not immediately invoke that group for sync playback

✓ No computer automation of manual process – not abstract

- Not previously possible to communicate with passive speakers over data network
- Not previously possible to remain in a standalone mode while adding zone players to groups

Google's Arguments are Wrong

- X Not a process humans engaged in before computers
 - The invention is not a computerization of some manual process
 - It is an alternative technological approach only made possible by the technological invention of networked media players that coordinate together over a data network in a networked media playback system
 - Solves a problem with a technological approach grounded in a specific technological system – not computerized automation

- X Neither the claims nor infringement depend on any user intent

Google Did Not Satisfy Its High Burden to Prove Invalidity

- Google's invalidity assertions focused on only some, but not all, of the limitations of Claim 13.
- To prove invalidity, however, Google is required to prove by clear and convincing evidence that *each and every* limitation is disclosed by or rendered obvious over the prior art.
- Thus, the Court should deny Google's motion for this reason alone.

YTR Did Not Prove a Motivation to Combine

- Google fails to adequately explain how a POSITA would modify YTR to include the missing features of Claim 13.
- Instead, Google declares that it would have been obvious without any analysis or support.
- The mere conclusion that it would have been obvious to modify YTR is insufficient to prove invalidity.

ActiveVideo Networks, Inc. v. Verizon Communications, Inc.,
694 F.3d 1312, 1327 (Fed. Cir. 2012)

The December 2011 Source Code is Not Invalidating Prior Art

➤ DIAL was released on February 27, 2013.

DIAL

- Overview
- Protocol Specification
- Use of the DIAL Mark
- Details for Developers
- FAQ
- Announcements
- Contact Us

DIAL Registries

- About the Registry
- Application Name/Prefix Registry
- Application Name Registration
- Application Prefix Registration
- Additional Data Reserved Names Registry
- Reserved Application Name Registry

DIAL Code

- Sample Implementations
- Archive**

Archive

<input type="checkbox"/>	DIAL-1.0.5-19c903c.tar.gz Download	A C/C++ Server and Test Client. SHA1:6430255ea33d0b5a461326b443b03d6baed3ffa1	46k	v. 2	Jun 22, 2015, 9:26 AM	Unknown user
<div>Previous Releases</div>						
<input type="checkbox"/>	DIAL-1.0.1-1601607.tar.gz Download	Superseded by v1.0.2. SHA1:8dfb8e5507c3a1da2969f590a1e3c832b9506d25	66k	v. 3	Feb 27, 2013, 12:58 PM	Unknown user
<input type="checkbox"/>	DIAL-1.0.2-1676049.tar.gz Download	Superseded by v1.0.3. SHA1:98c7181cce2f4eff74a5144c7b8c98d40ab37b9c	38k	v. 3	May 23, 2014, 10:11 AM	Unknown user
<input type="checkbox"/>	DIAL-1.0.3-2163113.tar.gz Download	Superseded by v1.0.4.	51k	v. 3	Jun 17, 2014, 11:15 AM	Unknown user
<input type="checkbox"/>	DIAL-1.0.4-2190235.tar.gz Download	Superseded by v.1.0.5	43k	v. 3	Apr 28, 2015, 3:27 PM	Unknown user
<input type="checkbox"/>	DIAL.tar.gz Download	Superseded by v1.0.1 SHA1:4930dd419b58dd99c36a48a8a49d951476db589c	62k	v. 5	Feb 27, 2013, 12:58 PM	Unknown user

<http://www.dial-multiscreen.org/archive>